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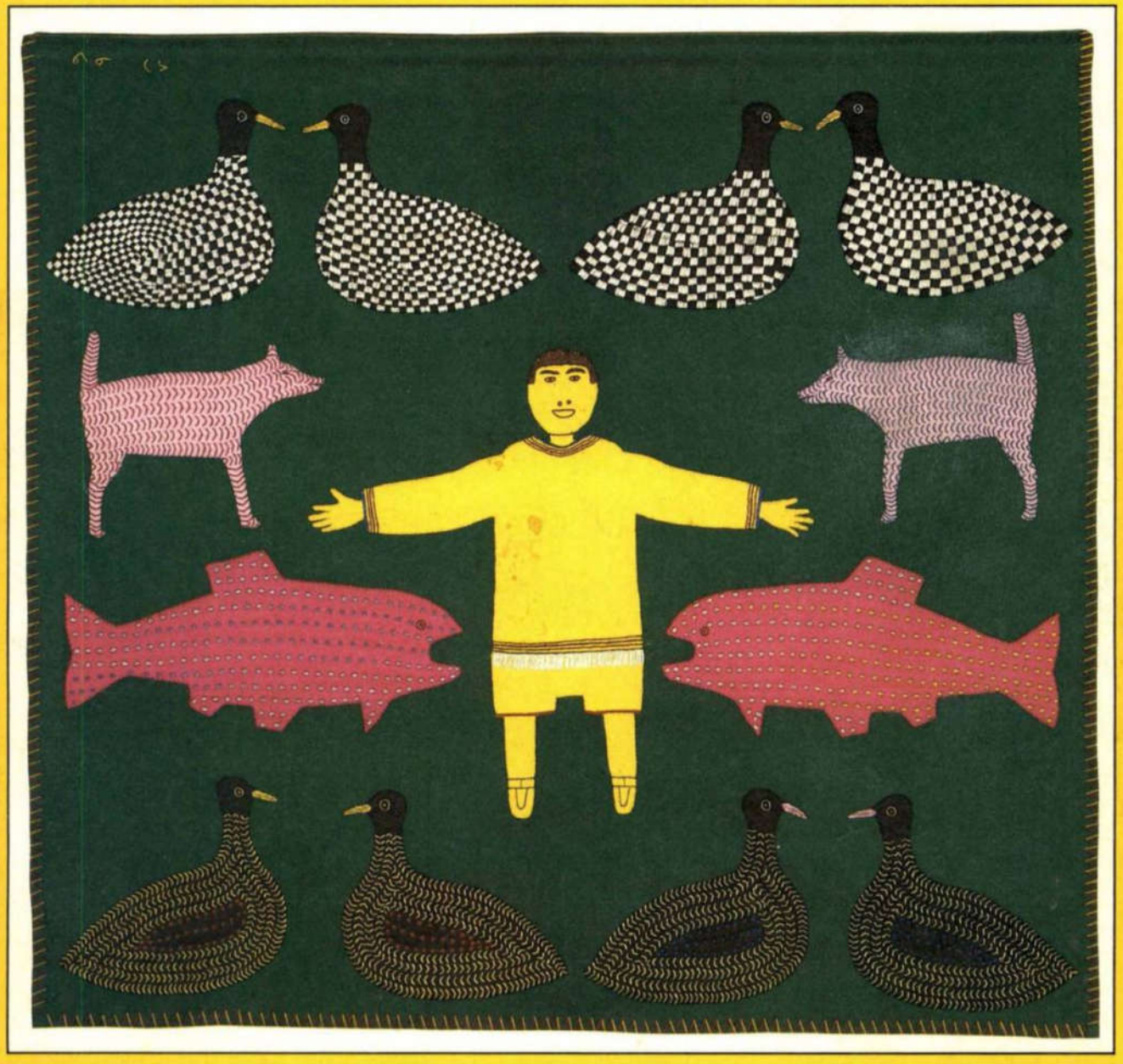
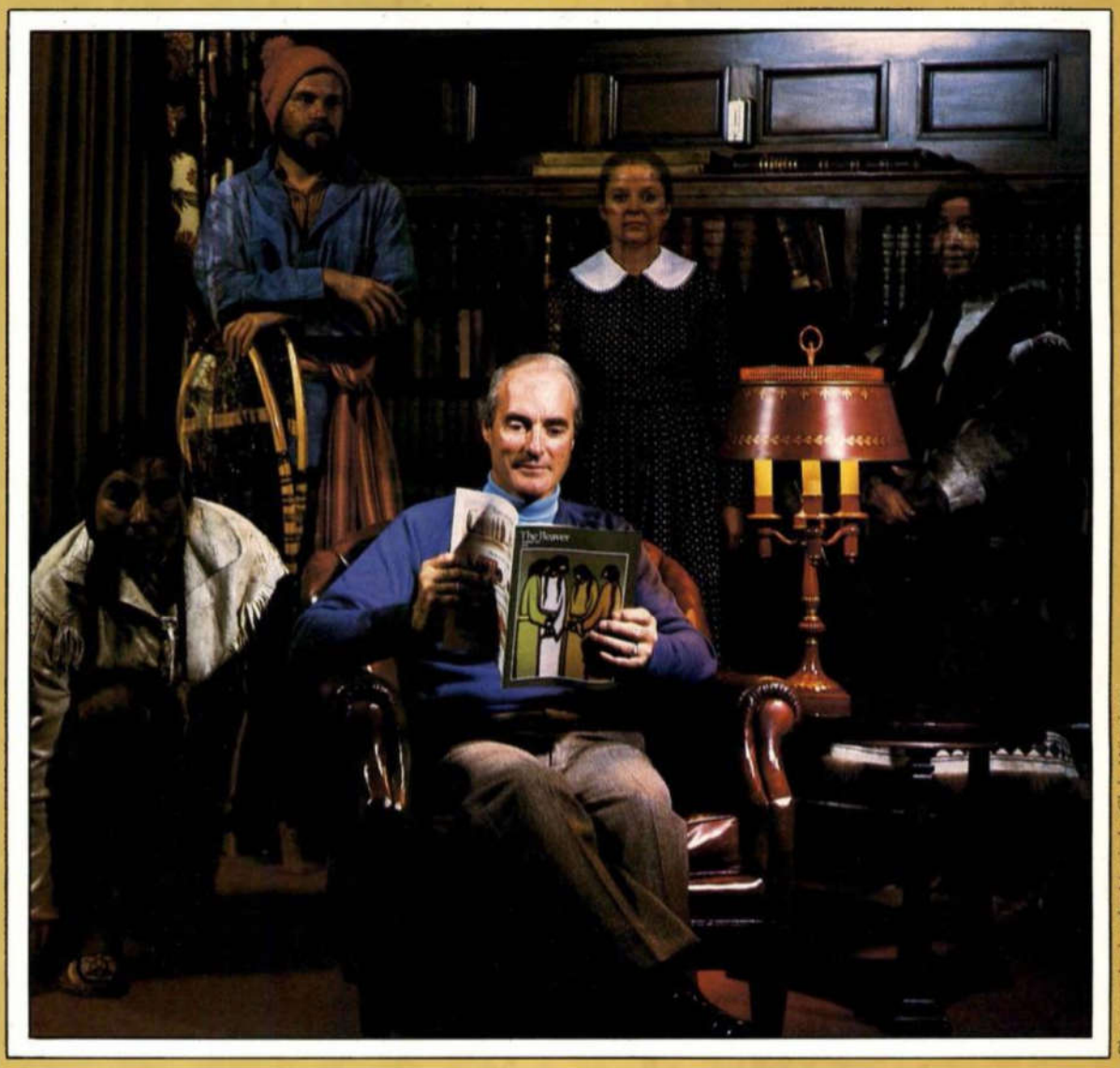


'Sons of God' by Pierre Berton

Saga of Northern Radio * Inuit Wall Hangings

A Timeless Gift



Photographed at the Manitoba Club, Winnipeg

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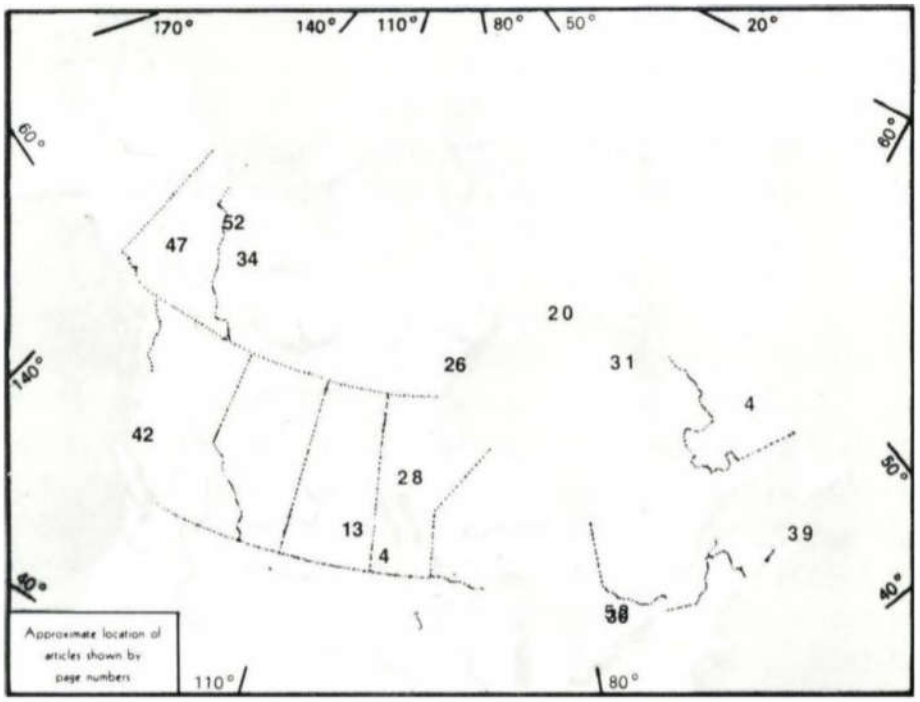

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COVER: Wall hanging, untitled, by Winnifred Tatya of Baker Lake. 91¼ cm x 97½ cm. From the collection of the Upstairs Gallery, Winnipeg. Reproduced by permission of the artist.

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After a century and a half in obscurity, the historic steel peace-pipe smoked by Ojibwa and Iroquois warriors in 1840 has been located in southwestern Manitoba.

Dr Peter E. Jones with the pipe presented to his father on his second fund-raising journey to England in 1838 by Sir Augustus d'Este, a member of the Aborigines' Protection Society of England. Photographed in Washington, D.C., in 1898 and reproduced by permission of the Smithsonian Institution.

Historic Peace-Pipe

By Donald B. Smith

Donald B. Smith, a professor of history at the University of Calgary, is author of 'Long Lance: the true story of an imposter'.

AFTER THE OJIBWA VICTORY over the Iroquois around 1700, the tribes made a pact of friendship, a treaty that on 21 January 1840 was to be renewed for the fifth time. Fifteen Iroquois chiefs faced two hundred Ojibwa chiefs and warriors across the council fire at the Indian village on the Credit River, twenty kilometres west of Toronto. They came together for the treaty which, once made, was so strong 'that if a tree fell across their arms it could not separate them or cause them to unloose their hold'.

Sloping Sky, known in English as Joseph Sawyer (he was named after the white Methodist missionary who had baptised him), rose. In his hand the Ojibwa chief, then in his early fifties, carried an ornate steel pipe tomahawk, about two-thirds of a metre long, with twelve silver ornamental bands on its fine-grained wood stem. As he smoked the pipe the chief prayed that the smoke of the calumet would ascend in a straight line upward to the Great Spirit.

The Ojibwa band, known as the Mississauga of the Credit, had been greatly influenced by Christianity. In the mid- and late-1820s Sloping Sky's nephew, Kahkewaquonaby (Sacred Feathers or, in English, Peter Jones) had helped to convert them to Christianity. To raise money for the Methodists' mission work this native convert, who himself became a Methodist minister, made several trips to Britain. On his journey in 1838, Sir Augustus d'Este, a first cousin of Queen Victoria, gave him the beautiful steel pipe.

What the Iroquois thought of their hosts' calumet is unknown. But they certainly knew the procedure of smoking the pipe. At their home on the Grand River (a hundred kilometres to the west) the master of ceremonies at their councils first rose to his feet, filled and then lighted the pipe of peace from his own fire. One after another he drew three whiffs from the pipe, blowing the first toward the point of sky directly overhead, the second toward the ground, and the third toward the sun. By the first action he returned thanks to the Great Spirit for the preservation of his life over the course of the last year, and for being permitted to be present at this council. By the second he returned thanks to the Earth, his mother, for her bounty. And by the third he returned thanks to the Sun for his never-failing light, which shone on all.

At the Credit River Council the Ojibwas' peace-pipe tomahawk, once it had been properly lit and presented, passed around the council ring. All chiefs smoked it. The silver blade, inscribed 'From Augustus d'Este to Ka-Kiwe-guun-ebi, 1838', flashed in the light of the fire. As the smoke ascended upward the Great Spirit would witness it mingling together as one body.

The ceremony had a tremendous significance, ratifying as it did the lasting peace concluded between two formerly hostile alliances. In the seventeenth century the Algonkian Indians, the native group to which the Ojibwa belonged, had battled with the Iroquois for control of the huge land mass between Lakes Huron, Erie and Ontario, an area the size of all of England. The Iroquois had won the first round around 1650, dispersing the Ojibwas' allies, the Hurons. But they had lost the second around 1700, when the Ojibwa swept southward expelling the Iroquois from present-day southern Ontario.

So much had changed since that first Ojibwa-Iroquois alliance made at a great council at the eastern end of Lake Ontario. The Iroquois had come north as refugees after the defeat of Britain in the American Revolution in 1783. Generously the Ojibwa had given the 'Feathered United Empire Loyalists' a home on the Grand River, in the heart of their own territory. Then, the white Loyalists and later, more white settlers arrived, tens of thousands of them by the 1840s. The several thousand Ojibwa and Iroquois became only a tiny minority in this new colony the white man called 'Upper Canada', which made it ever more imperative to renew their alliance, and to stay together.

Today, in an age of numerous meetings between the First Nations and the different levels of government, the Augustus d'Este pipe has great historic importance. It should be used to open one, or many, of the modern-day First Ministers - First Nations Conferences in Ottawa. But since the nineteenth century the location of the pipe has not been known. Like so

many objects of importance to Canadian history it could not be traced.

For over ten years I looked for that historic pipe used at the Grand Council of 1840, and thanks to David L. Braddell, the Recorder of the Reston and District Museum, in southwestern Manitoba, I located it.

I had first learned of the pipe in 1969 when I began researching my Ph.D. thesis on Kahkewaquonaby and the Mississauga Indians, as the white settlers termed the Ojibwa living along the north shore of Lake Ontario. The son of a white surveyor and a Mississauga woman, Kahkewaquonaby had grown up in both his mother's and his father's worlds. Converted to Methodism in 1823, the handsome twenty-one-year-old mixed blood became a missionary to his mother's people, and for the next thirty years he worked to convert the Ojibwa to Christianity. He had been given the costly steel pipe by Sir Augustus d'Este, a member of the Aborigines' Protection Society, founded in England to help protect the land and the human rights of native groups throughout the British Empire.

In his *History of Ojebway Indians; with special reference to their conversion to Christianity*, Peter Jones mentions the pipe, in describing the important council held in 1840 to renew the peace between the Ojibwa and the Iroquois or Five Nations. 'The pipe used on this occasion was the beautiful *pipe tomahawk* presented to Kahkewaquonaby in the year 1838, by Colonel Sir Augustus D'Este, son of the late Duke of Sussex.'

This Hill and Adamson calotype of Peter Jones with the steel peace-pipe was taken 4 August 1845, in Edinburgh, Scotland, and is reproduced by permission of the Scottish National Portrait Gallery.

Subconsciously, I think that my search began the day I read that passage. Slowly over the next ten years I obtained more details about it.

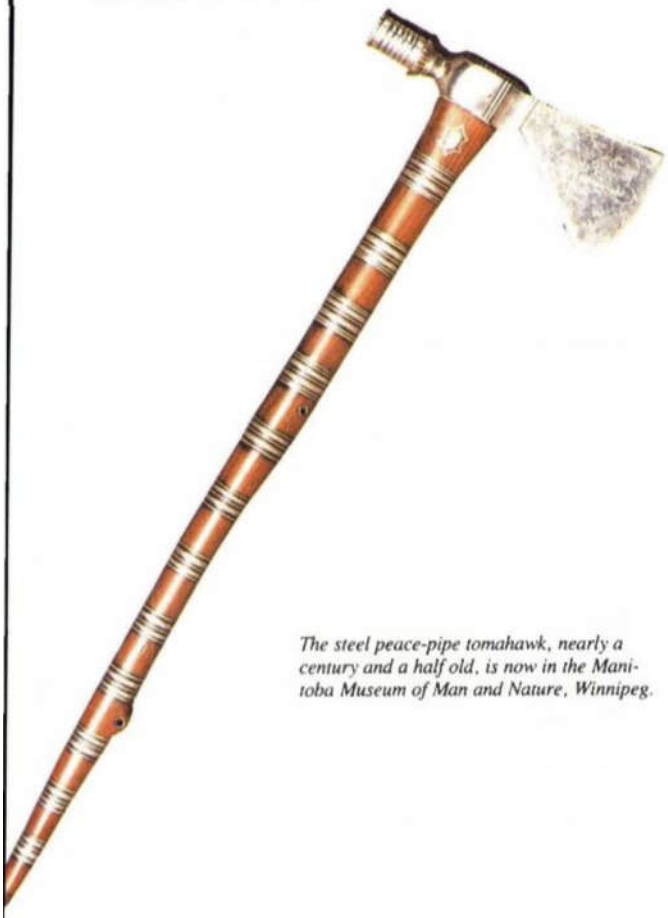
A year or so later I found another reference to the pipe, this time in a Scottish newspaper, *The Banner*, published in Aberdeen. The article, dated 15 August 1845, described Peter Jones's visit to Aberdeen on his British tour in that year. At this public address in the city he showed the pipe of peace used at the Council of 1840. 'It was a piece of neat looking manufacture, with a stalk about eighteen inches long bound round with numerous silver hoops, and a hatchet or tomahawk turned downwards, and its prow surmounted by that position of the pipe which holds the tobacco.' *The Banner* added that Sir Augustus d'Este had given Peter Jones the pipe.

Several years later, in the summer of 1976, I found a photograph showing the pipe. Peter Jones's son, Peter E. Jones, a medical doctor and his father's successor as Chief of the Mississaugas of the Credit (who in 1847 had moved to New Credit, near present-day Hagersville, Ontario, 100 kilometres to the west), had donated a number of his father's Indian artifacts to the famous Smithsonian Institution in Washington, D.C. At the Smithsonian I found photos of the artifacts and several shots of Dr Jones holding the pipe. The Museum had a number of the artifacts, and while looking through them, amidst a roomful of Zuni and Hopi Indian pots, I found several from the Peter Jones estate but no peace-pipe.

In 1977 came another reminder of the elusive pipe. A rare book dealer in Montreal advertised the auction of what was mentioned as one of the earliest photographs of a North American Indian. The cover of the auction book carried the photograph, or calotype, of Peter Jones, taken in August 1845 in Edinburgh. Tightly grasped in his hand appeared the pipe, as verbally described in the Aberdeen *Banner* on 15 August 1845.

It was a tantalizing reminder of the object, but where could the pipe be today? Through my research I had corresponded with, and had met descendants of Dr Peter E. Jones's wife, Charlotte Dixon Jones, an English woman who, when the doctor had married her, was a widow with three small children by her first marriage. Unfortunately, while they had some of the precious family artifacts (some religious books and letters) there was no peace-pipe in their possession. More of Peter Jones's Indian materials were at the Vernon Museum in Vernon, British Columbia,

Manitoba Museum of Man and Nature



The steel peace-pipe tomahawk, nearly a century and a half old, is now in the Manitoba Museum of Man and Nature, Winnipeg.

Donald B. Smith

Reg Campion of Pipestone, Manitoba, (left) who received the pipe from the estate of Silvanus Dixon, stepson of Dr Peter E. Jones; with David Braddell, Recorder of the Reston and District Museum, who identified the historic pipe.

donated by Charlotte Dixon Jones's son Elvin. But there was no pipe. I reconciled myself to the fact that it had been lost. Then in August of that year I received a letter from David Braddell.

David (who had learned of my projected biography of Peter Jones from Lillian Montour, Librarian of the Woodland Indian Cultural and Educational Centre in Brantford, Ontario) wrote on 18 August 1982. He had found the pipe, and had pieced together much of its history himself. He wanted supplementary details about Peter Jones. He concluded his excellent report: '[the peace-pipe] with its background in which integrity, devotion, friendship and honor played their parts, deserves a prominent place in a historical institute where it may be studied further and publicly seen'.

Last August with David, I visited Reg Campion, the present owner of the pipe, at his home in Pipestone, a small village near Reston, Manitoba. Both men were fascinated to see my two photos, one dated 1845 and the other 1898, of the same object. Over the years several antique dealers had offered Reg good sums to sell the pipe, but he refused them all, believing that the pipe 'had some meaning'. Fortunately for Canadian history he left it hanging up on a beam in the Campions' living room where David first saw it, on his visit in August 1980. Curious about its origins, David had carried on his own search, for two years. Now all three of us pooled our information.

Reg had obtained the pipe from Silvanus Dixon, a farm labourer originally from Hagersville, Ontario, who had come to the area in the 1920s. He helped on the farm of Reg Campion's brother, Eugene, in the early 1940s. Every week Reg drove Silvanus to the Masonic Lodge meetings in nearby Virden and they became close friends. Silvanus apparently instructed the Campion family that his treasured Indian peace-pipe and some of his Masonic medals be given to Reg, which was done when he passed away in 1945, in his 81st year.

I knew instantly that Silvanus was Dr Peter E. Jones's stepson; Dr Jones must have willed Silvanus the pipe before his death in 1909. Silvanus and his mother moved from Hagersville to Alberta in 1913 or so, and took the pipe with them. Later they went further west to British Columbia. When Silvanus moved to Manitoba he brought the treasured artifact with him, but said little to the Campions about it. Reg thus knew nothing of the history of his friend's gift. It was David Braddell who set to work to discover it, and in the process contacted me in the summer of 1982.

Happily this pipe, now nearly a century and a half old is now at the Manitoba Museum of Man and Nature in Winnipeg. We are indebted to David Braddell for researching its history, and to Reg Campion, who once he learned its value donated it to a major Canadian museum. ◆

The Blind Man & The Loon

By Drew Armour

Associate professor with the faculty of medicine, Dalhousie University, Halifax, Dr Armour has had a longtime interest in the Inuit people and their art.

HOW DID THE SUN and the moon originate?

A grandmother lived with her grandchildren, a young man and woman. The grandson suddenly became blind, perhaps due to snowblindness. As a consequence, because the three lived alone with only a dog as a companion, they became poor and their food supply diminished. One spring day, a polar bear came to their igloo. The ice window having melted, the igloo had a hole in it. The young man drew his bow while the grandmother aimed the bow and arrow at the bear. He shot the bear and it ran away growling, dying a short distance from the igloo. The grandmother said the arrow had struck their dog and that it was the dog that had growled. Then she and her granddaughter went outside where they skinned and cut up the bear. The women ate the bear meat but did not feed the young man. Indeed, they left him in the melting igloo and moved into a tent beside the bear carcass. The sister, concerned about her brother, concealed meat in her clothes and unknown to her grandmother fed her brother, thus keeping him alive.

When it was warmer the brother asked his sister if the lakes nearby had melted and whether she ever saw loons on them. When the lakes had melted and one of them had loons on it, at his request, she led her brother to that one. Also at his request, as she returned from that lake she left landmarks to indicate the way back to the tent. Sitting by the edge of the lake, the young man listened until he heard splashing in the water. A kayak was near at hand whose owner said, 'Come here and sit in the kayak.' He was paddled out into the lake and then was told he would be taken underwater. The stranger said that when he could stand it underwater no longer, he was to notify him. They went underwater and when he was brought to the surface he was able to distinguish things with his eyes. He was taken down two more times, each time a little longer. Each time his vision improved, and after the third time he could see perfectly. The stranger turned out to be a loon. They paddled to land and on getting out of the kayak, the loon flew away. The young man returned to the tent by means of the landmarks left by his sister. At the tent he saw the bear's skin and asked his grandmother where the skin had come from. Recognizing that he could see, she said that it had been left behind by some passing hunters. Thereafter, the young man with his sight regained, once again became a successful hunter. He frequently went to the ice edge and harpooned white whales.

One day the young man asked his grandmother to accompany him on his hunt. When they were at the water's edge the old grandmother cried out 'Here comes a young whale, harpoon it!' But the young man harpooned the largest white whale he could and quickly fastened the harpoon line around her waist. The whale pulled the grandmother into the water and diving, pulled her to where whales live. Soon she resurfaced, pulled by the whale, singing a song asking why her grandson had done this after she had looked after him. The young man asked, in turn, why she had not fed him. In the water, she disappeared and reappeared many times, calling when on the surface, 'Lumak, lumak'. She is still seen occasionally as the whale drags her about the sea.

The young man and his sister left that place. They went into the world for the shame of having killed their grandmother. There they had a number of momentous experiences, for instance being attacked by creatures with long claws or living among people with other anatomical abnormalities. Finally they stayed in a place where people were the same as they were, both marrying local people. After a while, the young woman developed a sexual liaison with an unknown man. One night, in order to find out who was

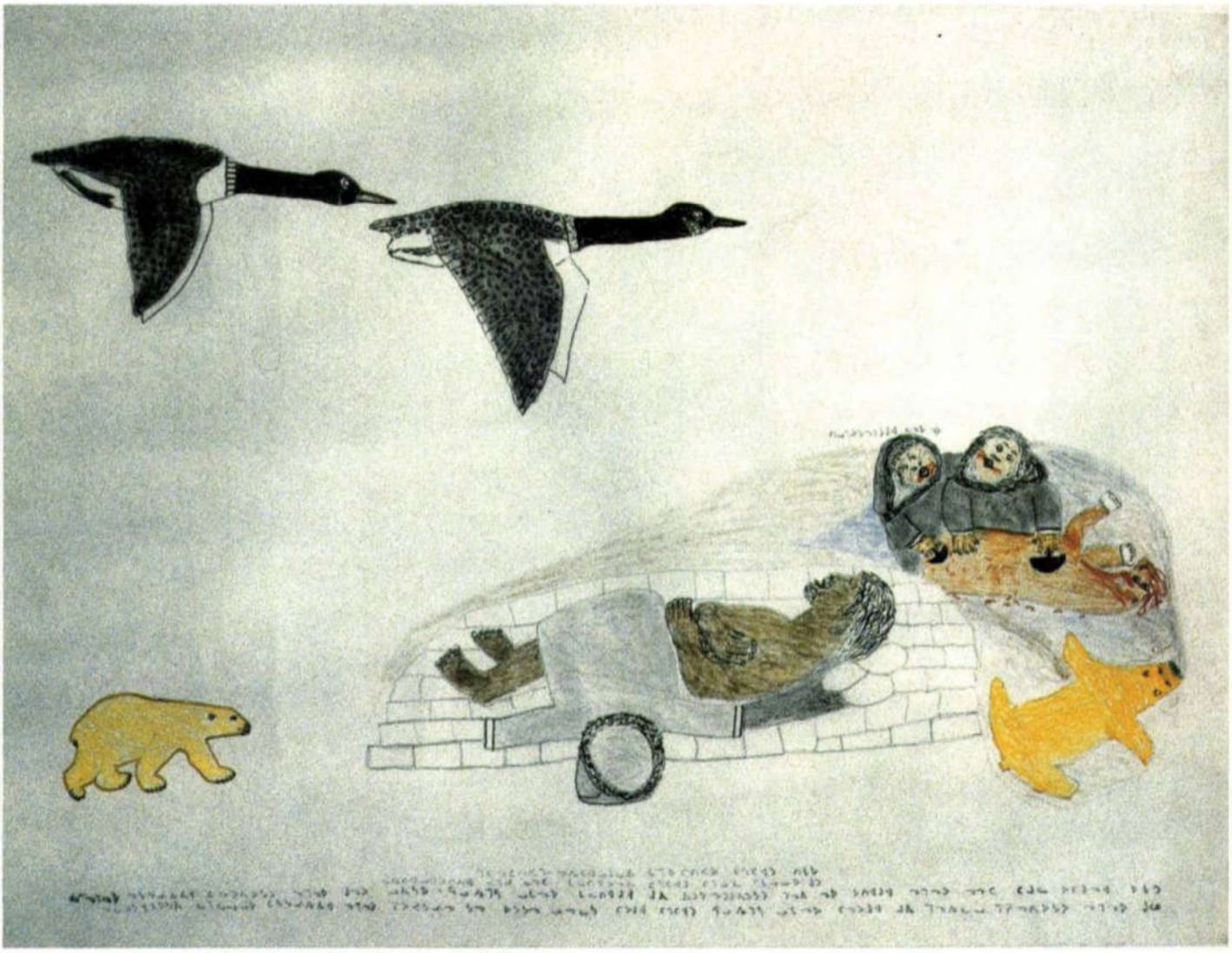
Fragments of a powerful Inuit epic are revealed in the art forms of the older generation of artists who remember and understand the oral tradition.

The blind man depicted before and after killing the bear. Drawing and text by Pitseolak Ashoona (45 cm x 62 cm), Cape Dorset, c. 1980. The syllabics read 'This is the woman who kept her son hungry and poor. The daughter was full of love for her brother and by night would sneak bits of boiled meat to him through the window. The snowhouse, you see, had a window of intestines split and sewn. [After the mother guided her blind son to kill a polar bear with his bow] he says, "It's dead up there." He is sure of this because he heard the thud of [the bear's] fall after his shot. But his mother lies, replying "No, it didn't die." It is said that every time the mother cooked up [some of the bear meat] her daughter would conceal a little meat to treat [her brother]. As these writings grow longer and longer, I'll stop here.'

Drawing reproduced by permission of the West Baffin Eskimo Co-operative on behalf of the artist.

The blind man on the back of a loon. Carving in stone by Peter Angutiguluk, Inoucdjouac, 1981.

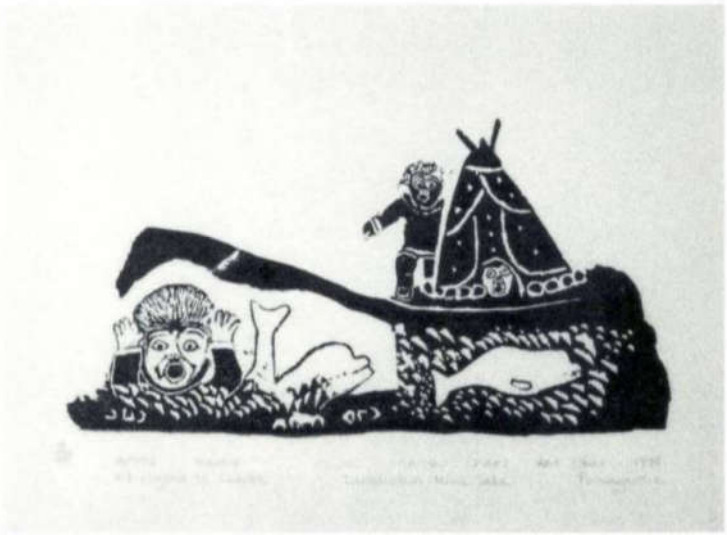
Woman being pulled in the sea by a whale. Carving in stone by Josephine Angma, Payne Bay, 1979.



As the women flense and eat the bear, loons fly over the blind man. Drawing (51 cm x 66 cm) by Davidialuk, Povungnituk, 1975.

The blind boy dreams of loons while he is underwater. Stonecut print in violet (32 cm x 40 cm) by Davidialuk/Annie Amamatuak, Povungnituk, 1977.

Drawing and stonecut prints from Povungnituk, and carvings, reproduced by permission of La Fedération des Coopératifs du Nouveau-Québec, on behalf of the artists.



Legend of Lumak II. Stonecut print in black (29 cm x 45.5 cm) by Davidialuk/Mina Sala, Povungnituk, 1977.

cohabiting with her, she put lampblack on her fingers and when they lay together she blackened his face. Afterwards, she followed him to the feasting house and found, to her chagrin, that her brother had lampblack on his face. In her shame she ran from the igloo, taking a lamp with her. Her brother, realizing what had happened, picked up another lamp and ran after her. The man fell on his way out, however, and his lamp was extinguished. He continued to chase her and suddenly they rose from the ground. They, one chasing the other, rose until they moved around the dome of the heavens where they became the sun and the moon — the sun with her burning torch and the moon with light devoid of warmth. Occasionally, he momentarily catches up with her, explaining an eclipse of the sun.

The foregoing is a précis of one of the great Inuit monomyths. As with most oral literature, that which has been recorded is a skeleton of the original — much having been lost in the transliteration. This song cycle was very extensive, perhaps taking hours to relate. It is a tale in which a hero is able to traverse the three visible environments: land, water and sky. It is told in many variations across the Arctic from Alaska throughout Canada to Greenland and Labrador. Traces of this myth are found in Siberia, even though it may not exist among the Siberian Inuit in the form described above. There are a number of variations on this theme existing in the lore of other North American indigenous people as well. The Inuit variations of this theme are too numerous to be described in any detail. For instance, the blindness of the young man may be intentional, caused by snowblindness or by a birth defect. In some regions it is a tale explaining the origin of the narwhal.

In this monomyth the young man is reared without

The sun, man and spirits. Drawing in pencil (45 cm x 60 cm) by Kenoyuak, Cape Dorset, c. 1961. Reproduced by permission of the West Baffin Co-operative on behalf of the artist.

male influence, in a state of acquired ignorance. He is blind — that is, he is ignorant. He kills the symbolic father, personified as a polar bear — the great hunter of the North. Then rites of passage occur in which a loon or loons magically take him underwater. After the rites of passage, he is the world man, the ultimate impersonator of wisdom — he has risen. With knowledge gained he revenges his past. Following matricide, the adult male and female cross many thresholds in their world travels. Finally, the driving forces of destiny lead to incest and public shame. The man and woman are transformed in flight to another world and immortality — the ultimate boon. The sun/moon: male/female symbolism is created. Although the sun is not considered an important personage in the Inuit pantheon, the moon is. It controls much, including the fertility of women — the life of the tribe.

This tale describes the conflict and co-operation responses of individuals in an incomplete family environment separated from other individuals. It is a description of many different human responses to stress. This tale delineates a number of cultural taboos — in particular, the abandonment of vulnerable individuals and incest. It delineates how a person can be cured of life-threatening physical or psychological ailments. Each portion of this monomyth has profound psychological implications, which cannot be detailed here. This myth is present in cultures scattered throughout North America, and traces of it are found in cultures as far away as Australia. It is not surprising that this momentous story has been the subject matter of modern Inuit art. Certain artists, particularly older ones like Davidialuk, have vividly described this Inuit tradition with stone or paper. Recollections of oral traditions by the older generation are translated into individually significant artistic statements which can profoundly affect those of other cultures. Although we are left with fragments of a powerful epic, we can glimpse its significance through the artistic legacy of those who understood. ◆

Bibliography is available on request from The Beaver, 77 Main Street, Winnipeg, Manitoba R3C 2R1.

The Sons of God

By Pierre Berton

A chapter from the forthcoming book
'The Promised Land: Settling the West 1896 - 1914'
To be published this fall by McClelland and Stewart

In all his years on the prairies, Wes Speers had never seen anything like it, and knew he would never see anything like it again.

He was standing on the open prairie, some thirteen miles north of Yorkton — a tall, rangy figure, Sifton's appointee as colonization agent for the West — waiting for the Doukhobors.

They came upon him slowly like a black cloud, low on the prairie, densely packed, thirty to forty abreast. There were 1,160 in the first group, stretched out for three miles; six miles behind, another group advanced, 730 strong. The procession was headed by an old man with a flowing white beard, chanting and waving his hands. Behind him, two stalwart Russians led a blind man, followed by men bearing stretchers of poplar branches and blankets carrying the sick, and behind them a choir, three hundred strong. The chanting, doleful and sonorous, never stopped, the multitude repeating the verses of the Twenty-second Psalm over and over again: *My God, my God, why has thou forsaken me?*

The date was 27 October 1902. In the weeks to come, this and similar spectacles would haunt the dreams of Charles Wesley Speers, the quintessential Westerner, the supreme optimist, the genial back room raconteur. Years of service to the Liberal party had not prepared him for the extraordinary events of this month, but Speers was equal to them. A man of quick decision and awesome efficiency, he had been given the job by Sifton as a political reward; after all, it was Speers who had lent his name to the charade of a nomination meeting in Brandon in 1896, and it was Speers, following the script, who had graciously stepped aside in favour of his future master — but not before delivering a eulogy to the Young

The Doukhobor trek to Yorkton, October 1902.
Public Archives Canada C-9784

B.C. Archives

Napoleon of the West.* This did not mean that Speers was unsuited for the post. His years as a Liberal wheelhorse and organizer had not been wasted: his engaging personality, his natural bonhomie, his physical energy, and his tact had made him a valuable member of the Manitoba Liberal hierarchy. He was, as the saying went, 'a good mixer'. Now these talents were to be channelled into a different course.

For the next fortnight, Speers would come head to head with the most stubborn, dedicated, and recalcitrant group of fanatics in Western Canada — the splinter group who called themselves the Sons of God. These people seemed intent on killing themselves in the name of the Saviour, not by any sudden action but simply from hunger and exposure on the frostbitten prairie.

The government faced a dilemma: it could not allow the demise of close to nineteen hundred souls; neither could it be seen to thwart the religious aspirations of a devout and inoffensive religious sect. When the Doukhobors come, Speers told his people, treat them with firmness but also with kindness. There must be no violence: after all, they are intent on harming nobody but themselves.

Methodically, the army of men, women, and children advanced on the colonization agent. He knew it was useless to reason with them. They required nothing of him, they said. 'We are going to seek Christ,' they told him vaguely. Christ, apparently, was somewhere in the southeast, somewhere in the land of the sun, far from the windswept prairie, in a country where the fruit hung thickly on the trees and vegetables were cropped the year round, where it was not necessary to use a single animal for labour, food, or clothing.

The pale prairie afternoon would soon turn to dusk. Speers knew that he must find immediate shelter for these people who believed, with a Gibraltar-like con-

*Clifford Sifton, Minister of the Interior 1896-1905.

The Doukhobor trek to Yorkton, October 1902.

viction, that God would look after them, feed them, protect them from the elements. Back he rode to Yorkton to arrange for accommodation in the immigration hall, the Orange Hall, an implement warehouse, a pool hall, a grain elevator. Some of the children were crying with hunger. The people were living on dried rose-hips, herbs, leaves, and grasses. The women of Yorkton would have to feed them — if they agreed to be fed.

Speers was saddened by what he had seen. He liked and admired the Doukhobors, knew scores of them personally. Like most of his political friends he was a fervent Methodist (after all, his middle name was Wesley); his father had been a lay preacher in Ontario. It is not too much to say that Wes Speers had an obsession with the destiny of Western Canada. He was one of a growing breed who, watching the West prosper, were convinced that the nation's future lay here in the rich soil of the prairie country, which Speers himself had farmed before this new job stole all his waking hours. Speers's feeling for the West amounted almost to a religion. In his eyes, the Liberal party's God-given duty was to fill the plains with people — stalwart vigorous men, like the Doukhobors, like Speers himself. Now that laudable policy was threatened by the aberrations of a fanatical splinter group.

Speers had picked up the first rumours of trouble at the end of June when he got wind of a report that some of the Doukhobors in the Yorkton area were acting strangely. By August these reports were confirmed. Certain members of the community were freeing all their animals — actually turning their cattle loose on the prairies — burning their sheepskin vests and leather boots, making sandals from plaited binder twine, refusing to eat eggs, butter, or milk, abandoning their horses and hitching themselves as teams, and making no provision for the coming winter by putting up hay for their stock.

What on earth was going on in these seemingly placid, squeaky-clean villages? All that Speers knew

was what he was told: some of the Doukhobors had come to believe that it was a sin to exploit animals in any way. The government corralled the stray beasts — 120 horses, 95 sheep, 285 cattle — and sold them at auction, realizing sixteen thousand dollars for the Doukhobor trust fund. But why this unexpected and eccentric turn of events?

The problem had its roots in the complex mind of Peter Verigin, languishing comfortably in Siberian exile and daydreaming of a pure Tolstoyan society, an ideal world, a paradise on earth — unattainable, no doubt, but pleasant to speculate over — a world in which the sun would always shine, where men would live on fruit and never exploit their animal brethren, where money would not be needed, and metal, the symbol of an industrial society, would be outlawed.

Verigin did not transmit the specifics of his impossible dream to the brethren in Canada; his correspondence was more practical and prosaic. But he did communicate his ideas in high-flown letters to the idealists at the Purleigh community in Essex, where the expatriate nobleman Tchertkoff, without a by-your-leave, had them printed in a booklet in the Russian language. When, early in 1902, copies finally reached the literate elders of the Doukhobor communities in Canada, they caused a sensation.

For more than fifteen years members of the sect had been without a pope to guide them. They were hungry for leadership, especially by 1902, when the Canadian government began to press upon them demands they could not accept. Canada wanted them to file individual titles to each 160-acre homestead. Now that the land was surveyed, the government was insisting on a resolution of this impasse. In addition, it wanted every Doukhobor to take an oath of allegiance to the state. Now, out of the blue, came an exhortation from the one man who could stand up for them against the same kind of authority that had forced their exodus from Russia.

There was more, surely. There must also have been a longing for the kind of sunny paradise that Verigin dreamed of, where frost never fell, winds did not blow, and prairie white-outs were unknown. The exiled leader had talked of warmth and energy from the sun: 'Man employing food raised by an abundance of solar heat, such as, for instance, raspberries, strawberries...tender fruits, his organism will be formed, as it were, of energy itself....'

Slowly, a sect within a sect was forming. Its members called themselves the Sons of God. Self-appointed apostles began moving through the villages, spreading the new gospel. And when one of the most respected elders, Nicholas Zibarov, a huge bear of a man with a tangled mass of beard and hair, joined the movement and threw away his shoes, more than a quarter of the whole Doukhobor population was prepared to follow wherever he led. If Verigin was the Doukhobor Messiah, Zibarov was his John the Baptist, and that is how he began to refer to himself.

On that night of 27 October, the pilgrimage halted three miles north of Yorkton. Men, women, and children huddled together in a poplar bluff without a fire to warm them. The next morning, Wes Speers, who had arranged accommodation, rode out to reason with the leaders. Shortly after, to the astonishment of the townspeople, the entire assembly straggled into the village.

'What is it you want?' one of the Yorkton men asked.

'We are going to a warmer climate where we can live on fruit and will not need to use horses or be under any government,' a Doukhobor woman replied,

Doukhobor women pulling a plough.

H. Pollard Collection, Provincial Archives of Alberta

Manitoba Archives

Clifford Sifton, c. 1896, the year he was appointed Minister of the Interior.

neatly summing up the three main reasons for the pilgrimage.

Speers confronted the leaders and vainly tried to persuade them to go back to their villages. They refused. 'We are searching for Christ and will seek till we find him,' he was told.

But Speers had no intention of letting the women and children go on. Almost every woman was carrying a child, and their cries of hunger threatened to drown out the endless chanting of the men. With the help of the Mounted Police, the colonization agent herded the resisting women into shelter. Some townspeople arrived with gifts of milk and biscuits, but these were refused, being the products of the labour of animals. When several hungry children tried to seize the biscuit, their mothers removed it, slapped their faces gently, and chided them for eating prohibited food.

With the women under shelter and guarded by three Mounted Policemen and fifteen special constables, the men were free to continue their march. They spent the cold night outside the town, standing up, praying and chanting. The following day they set off once more.

On they went, through Saltcoats, unaccountably throwing away the clothes they had bought in Yorkton, leaving behind a trail of boots, cloaks, and hats. They slept in ditches, lived on grasses and raw potatoes until their faces grew gaunt and their eyes feverish. Yet they still managed to walk twenty miles a day, their feet torn and bleeding from the frost-covered stubble. Six yards in the lead trudged their John the Baptist, Nicholas Zibarov, he of the burning eyes and flowing beard, a man who could neither read nor write but who had memorized great chunks of scripture in the Slavonic tongue. On his followers he exerted an almost magical effect: 'The Christ!' he cried. 'The Christ! I see him. He is coming to us. There, do you not see him? He is beckoning to us. Follow, follow on, children of the Lord.'

Speers, like an ineffectual shepherd, trailed closely behind, trying to get Zibarov and the other leaders to listen to reason. But the answer was always the same: 'Jesus will look after us.'

On 6 November when the mob reached Shoal Lake, Manitoba, Speers, looking worried, worn, and exhausted, tried again to offer free train transportation home for the pilgrims. Again he was refused. Zibarov, who had walked for four days with scarcely any sleep or food, seemed near collapse. Many of his followers were reluctant to sleep because they feared missing the Messiah when he came. They accepted gifts of dry oatmeal and salt from local merchants along the way, but little else.

They seemed to have no fixed destination in mind. A few collapsed. A handful accepted Speers's offer and returned home. Some listened to the blandishments and entreaties of other Doukhobors who had not joined the Sons of God but had followed behind to reason with their brethren. But when the pilgrimage reached Minnedosa on 7 November, there were still 450 hard-core believers, temporarily housed in the town's skating rink, determined to continue on, though none knew quite where.

Speers had no intention of allowing that. The thermometer was dropping and a fine snow was again falling. Two nights before, shivering in a cottonwood bluff, they had slept in six inches of snow. If they kept going, Speers knew, they would all die, and their deaths would be laid at the government's door. His fears were not only political. He was genuinely concerned with the fate of 'these misguided people'. To him they looked like hunted animals. They must be persuaded to go home — with force, if necessary, but with a minimum of violence.

Out from Ottawa came Frank Pedley, Superintendent of Immigration, a bulky Liberal lawyer and the only man of Sifton's department who was not a Westerner. Pedley was a Newfoundlander who had practised law in Toronto for the best part of a decade before joining the department. Now he and Speers tackled Zibarov and the other leaders in the skating rink. There would be no more leniency, they declared; the Doukhobors must return to their villages.

They made an interesting trio, these three pugnacious, determined men — the tall, stalwart Speers of the rugged features and firm jaw; Pedley, with his formidable moustache and heavy jowls; Zibarov, tall and haggard like an Old Testament prophet, his beard flecked with crumbs of dried oatmeal,

his eyes flashing with the fervour of evangelism.

Pedley, the Toronto lawyer, was no match for the eloquent Zibarov. They talked into the night for two hours through interpreters and got nowhere. In a shrewd and impassioned speech Zibarov defied the government forces. He and his followers would go on, he said, even if they froze to death on the prairie. Speers shook his head. They would go back to Yorkton the following day, he told the Doukhobor leader. An impasse had been reached.

All night long, the Sons of God prayed and sang while the townspeople, expecting trouble, waited outside the rink. Early that morning the Doukhobors tried to rush the doors. Four escaped, but the Mounted Police forced the others back. At 4:30 that afternoon, a special train with twenty-three police arrived. At 5:00, with dusk falling and a fine snow blowing, Speers stood up on a box and, through an interpreter, addressed the gathering: 'We have shown you a lot of consideration. You must go with us now. Get your wraps and blankets and march.'

One of the leaders — probably Zibarov — tried to interrupt. Speers was on him in an instant: 'It's men like you that have caused this trouble. If you don't keep quiet, I'll deal with you in a way you won't like. All of you get ready to come.'

About 150 followed Speers out of the rink but immediately turned from him and started to head east.

'Head them off. Don't lose a man!' Speers cried, seizing Zibarov by the neck. The Doukhobor leader struggled to free himself, at the same time starting the familiar weird chant, which was taken up by the others.

Speers now called for help, and about fifty of the townspeople answered. The resisting Doukhobors linked arms around each other and were pulled for yards across the frozen ground. A Herculean grain merchant named Arkwright broke the knot, and the squirming, kicking Russians were carried bodily to the waiting train. Zibarov struggled desperately, exhorting his followers to resist. Speers hailed a passing wagon, picked him up bodily, and hurled him into it.

Soon the space between the train and the station was filled with flailing bodies. The entire town turned out to watch the struggle — 150 townsmen against 450 fanatics. The Sons of God refused to strike a blow against their captors. Instead they tried to turn their faces eastward and resume their march. It took forty minutes to pack them into the waiting cars, and then 'the bloodless battle of Minnedosa', as the press called it, was over.

That broke the back of the pilgrimage. The women and children had already been taken back to the railhead near their villages. They refused to ride the rest of the way and insisted on walking the full twenty-seven miles. Within two hours of their return they had their furnaces going, vegetable soup on the stove, and were hard at work scrubbing and cleaning their homes.

For the Doukhobors, the pilgrimage left a bitter legacy. It turned public opinion against them just as the original criticism had died down and the country was beginning to applaud their energy and resourcefulness. The opposition press began again to rail against them, rarely bothering to make any distinction between the Sons of God and the majority of the newcomers.

The Conservative party felt itself vindicated for the original attacks on 'Sifton's Pets'. As the *Montreal Star* said: 'At the time they were imported, the Conservatives protested against such indiscriminate immigration, without investigating in a rational way the causes of their leaving Russia ... but the Liberals have acted like men demented in their frenzy to get certain lands taken up.'

One of the underlying reasons for the Sons of God demonstration had been the fear that the sect would shortly be forced out of the communal holding of land and that the government would insist upon individual titles as well as an oath of allegiance to the state. This fear was well founded. The urge to assimilate the Doukhobors — to turn them into carbon copies of Canadians — was just as strong as it was in the case of the Galicians. But the demand for what Zibarov's followers insisted were their 'rights' caused widespread irritation, making it even less likely that the Doukhobors would be granted any special consideration.

The *Edmonton Bulletin*, which believed that the difference between the fanatics and the majority was 'only a difference of degree not of kind,' wrote: 'The pilgrimage is the limit. It puts them outside of reasons or excuse. The authorities will not hereafter be justified in dealing with them otherwise than as ordinary citizens.' The Doukhobors would get the same treatment as the Mennonites and the Dunkards: 'Beyond that, not a step, not a line.' These were significant words, for they sprang from the pen of Frank Oliver, who as Sifton's replacement, would within three years have total control over the future of the Spirit Wrestlers.

For the moment, however, the villages were at peace. Exhausted by their long travail, the Sons of God rested quietly, awaiting the imminent arrival of their leader, Verigin, released at last from his Siberian confinement.

Wes Speers, too, was exhausted. After the events of the month just past, he found it almost impossible to sleep. He could not lay his head upon his pillow, he declared, 'without having frightful dreams of unwashed hordes of the fanatics dancing before his vision.' ◆

The Saga of Northern Radio

By Thomas R. Roach

Arctic Bay, c. 1943. The H B C staff house, and at right, the wind-powered generator for the radio batteries.

'Over the aerial at Arctic Bay was flashed a proposal of marriage, an account of a wedding, news of a birth, instructions from a doctor, and the story of a christening.'

'The Beaver', December 1939

In addition to its commercial importance, the creation of a fur-trade radio network in the 1930s brought far-reaching changes to the lives of Northern residents.

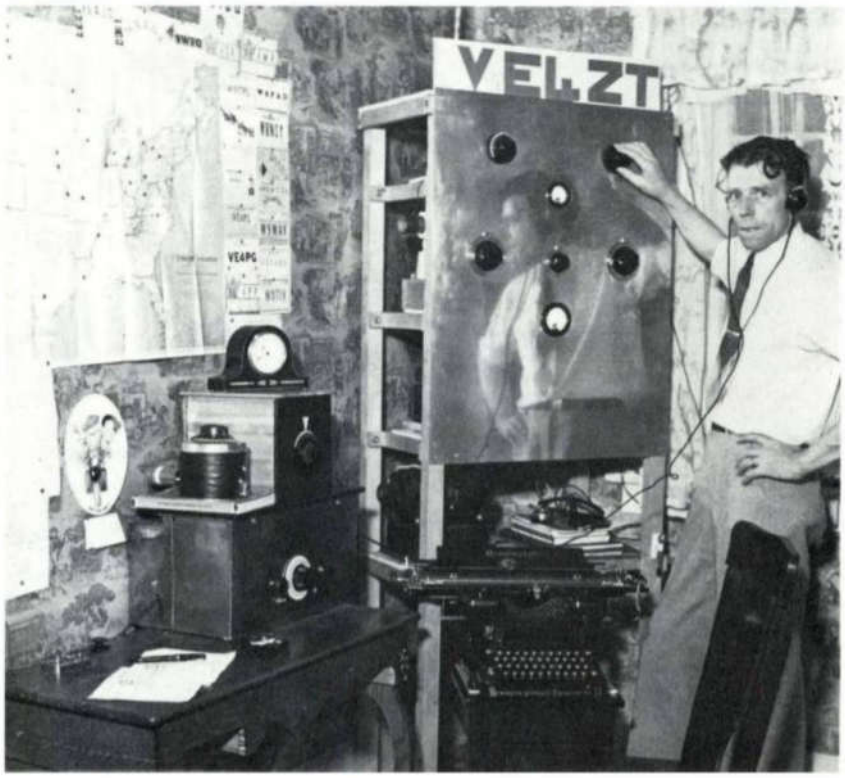
Thomas Roach of Ottawa is a free-lance researcher and author of several articles in his fields of interest: the Hudson's Bay Company, life in Northern Canada and forestry history.

Research for this article is largely based on a paper, 'Brass Pounders of the North' which the author presented to the 1983 annual meeting of the Canadian Science and Technology Historical Association.

Photographs, unless otherwise credited, are from the Hudson's Bay Company Collection.

IT WAS EARLY SEPTEMBER when the Hudson's Bay Company steamer *Nascopie* anchored opposite the trading post of Arctic Bay, Baffin Island. Along with the supplies for the year 1936-37 was a new manager for the post, Alan Scott. The bare rocky hills of Baffin Island probably reminded him of the Grampian Mountains near his home town, Aberdeen. The difference was the isolation of Arctic Bay compared to northeastern Scotland where he had just spent a year-long leave. Leaving home to return to northern Canada must have been especially poignant for him because during this vacation he had met and fallen in love with Eileen Wallace. Only once was there the chance he might exchange letters with her before the steamer returned next September. In March or April he would send a dog-team south with trade reports and mail. With luck, it would bring him a letter on its return, along with orders from the Company.

Scott's situation was not unusual in Canada's Arctic in the mid-1930s. The majority of traders, missionaries, prospectors and members of the Royal Canadian Mounted Police were equally as isolated. In the next few years, however, Scott was witness to a series of events that changed the lives of all those living in the North. His employer, the Hudson's Bay



Two pioneers in the development of the fur-trade radio network, 1934-35: Graham Sturrock at Cambridge Bay, and right: G.C.M. Collins at Norway House.

Company, issued radio receivers and transmitters to all its northern trading posts, allowing them to communicate directly with each other and with the outside world. Radio destroyed the barrier to communications caused by climate and distance, just as the airplane was to simplify travel.

The use of radio for northern communications started in the years before the First World War with the establishment of two radio stations by the Government of Canada. The stations, located at The Pas and Fort Nelson, were part of the plan to build a railway line to Fort Churchill on Hudson Bay. As the railway line neared completion in the late 1920s, more radio stations were built on the northern coastline along the route that ships would follow as they sailed into the port. By 1936 when Alan Scott was landing at Arctic Bay, the railway and string of guiding radio stations had been completed and the harbour opened. Most of the radio stations were operated in the shipping season; only the stations at Coppermine and Chesterfield Inlet were 'on the air' all year round. In 1930, a day or two before Christmas, these two stations had been instructed to make daily broadcasts of news and personal messages. The Hudson's Bay Company was to use these government stations as links in its own radio network.

The decision to study the feasibility and usefulness of a radio network was made by the Company in 1934. Aboard the *Nascopie* on her trip north that summer was Fur Trade Commissioner Ralph Parsons, and Governor of the Company Sir Ashley Cooper. These men talked at length with a summer employee working as a radio operator on the ship, George Horner, about the role radio could play in the North. Parsons believed the speed and reliability of radio communications could significantly enhance the Company's business operations. Using the immediacy, speed and reliability of radio the Company could adjust the prices paid for furs in its northern stores to reflect changes in world fur prices. Its store managers could inform the Canadian headquarters head office in Winnipeg in advance about the pelts — the quantity and grades — that would be off-loaded from the *Nascopie*. Parsons, who had spent all his working life in the fur trade, also knew the positive impact that improved communications would have upon his northern staff.

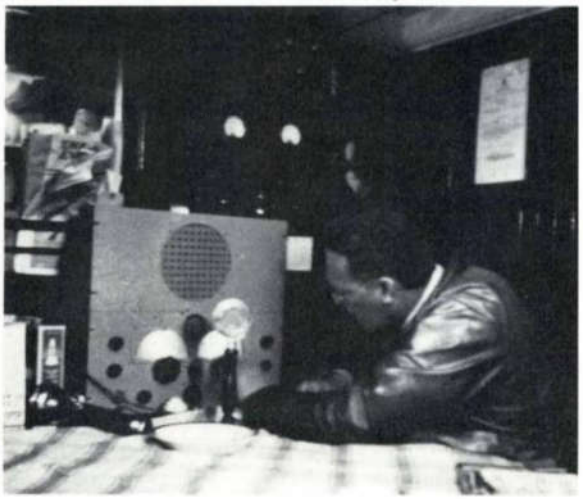
In the next two years, two of the Company's young apprentices who held amateur radio licences, demonstrated that low-power radio sets could operate in the North. G.C.M. Collins at Norway House and D.G. Sturrock in the Western Arctic were able to communicate with other amateurs all over the world from their isolated locations. Sturrock was the first to use short-wave radio communication in the fur trade for private commercial purposes. As an apprentice at Tuktoyaktuk in the summer of 1934 he operated a

radio station with a small dry-battery transmitter, and set up the same station at Cambridge Bay when transferred there in the fall of 1934. The Hudson's Bay Company obtained a private commercial licence for Sturrock to enable him to carry on two-way communication of Company business with the government radio station at Coppermine. This was continued when he was transferred to Gjoa Haven in the fall of 1935.

As early as 1928, W.E. Brown, while post manager at Wager Inlet, had conducted experiments with a transmitter made from parts of an obsolete radio receiver and had succeeded in transmitting a CW (Morse Code) signal to a maximum distance of about half a mile. Late in 1934, while Brown was a district manager working out of the Winnipeg office, he showed Fur Trade Commissioner Ralph Parsons and his assistant James Cantley a CW transmitter he had recently built.

> I explained to Mr. Parsons how little it would cost to supply each post with a CW transmitter and receiver. Brought his attention to the fact that through schedules with the Marine Radio Stations at Chesterfield Inlet, Churchill and Port Harrison the company transmitters could readily get messages out to head office [at Winnipeg] and receive messages from head office. Mr. Parsons turned to Jim Cantley and told him to make a note to the effect that they would install four sets in the Straits the following summer. He said he supposed the Marine Radio Station at Nottingham Island could handle them.
>
> The radio operator on the *Nascopie*, George Horner was a very competent man and I agreed with Ralph Parsons when he asked me if I thought he would be able to design the necessary equipment.

W.E. Brown, H B C district manager, listens to a radio message on board the schooner 'Fort Severn' in Hudson Bay, 1939.

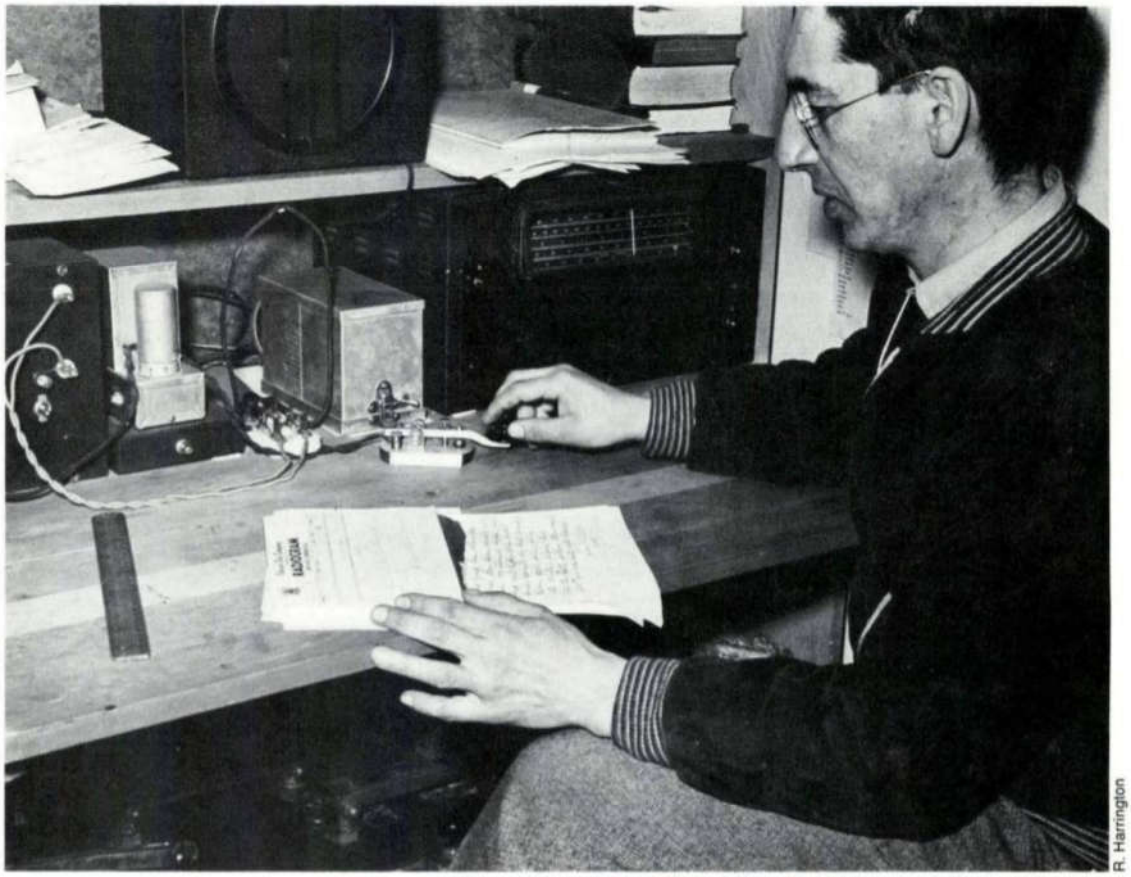


Ralph Parsons asked George Horner to carry out a series of experiments during the summers of 1935 and 1936 when he was again working on the *Nascopie*. Using the radio in the steamer to communicate with sets he had left at carefully chosen locations, he investigated the characteristics of radio transmissions in the Arctic. The study was a success and Parsons asked Horner, then in his last year of engineering studies at the University of New Brunswick, to make plans for a network of radio stations.

At the same time as the Company had under consideration the establishment of a network, a request for help was received from the newly formed federal Department of Transport. In a letter to Ralph Parsons written in the spring of 1937, the Controller of Radio, (located in Ottawa) W.A. Rush explained that the government wanted to expand radio coverage by installing a year-round station on the east coast of Hudson Bay, preferably at one of the Company's posts. Not only would this relieve supply problems, but would give the radio operators some social contacts. Rush thought that either the post at Great Whale River or at Port Harrison would be ideal. Parsons seized the opportunity and soon reached an agreement with Rush, that in return for its co-operation the Company would be issued licences for a number of radio stations. Also the government stations would co-operate in the operation of the network.

In April 1937, Parsons hired Horner as the Company's radio engineer. He had only a few months available before the *Nascopie* sailed. He moved to Winnipeg and set up an office and laboratory in the Company's Canadian headquarters. There he put together the equipment for the first stations and trained operators for sets. Luckily, three managers from posts in the Ungava district of northern Quebec were in Winnipeg waiting to return to work from leave. Horner taught the three men, and a young apprentice who had just joined the Company, to operate and maintain the radio sets that were to be issued to them. The apprentice, M. Ahlbaum, was given a short course in meteorology by the Canadian Meteorological Service in addition to his normal training. Ahlbaum was assigned to Arctic Bay which, in addition to being one of the posts to receive a radio, was to become the most northerly weather station in Canada.

The radio sets and the equipment to power them were models of ingenuity. Horner's choices show he had a thorough understanding of all the problems likely to be encountered in the Arctic, given the lack of resources at the isolated trading posts. The first problem shown by his tests and the experiences of the Company's amateur radio operators, was that dry batteries could not be used to provide the needed power. Not only were a large number needed to operate a transmitter and receiver for a year, but they had to be



R. Harrington

Horace Flett sending a radiogram from the Caribou post in Northern Manitoba to Hudson's Bay House, Winnipeg, c. 1947. Note the batteries under the desk.

kept from freezing. This was a major drawback because, in the treeless North, coal was used to heat the trading posts. It came with the other supplies on the *Nascopie* and it was not unusual for the steamer to miss an annual delivery because of adverse ice conditions. As a result, a post might not have enough fuel to heat the living quarters through a winter. Horner devised an ingenious solution to the energy problem: he purchased a system of windmill-powered generators charging a series of wet-cell accumulators, much like car batteries. As long as the generator kept them fully charged, the batteries could not freeze. Wincharger Corporation of Iowa City had developed this equipment for sale to isolated farms on the prairies.

The radio transmitters and receivers in use in the 1930s used electronic tubes and required two separate voltages to power them. The low voltage came directly from the accumulators but the high voltage presented a problem. Horner finally decided on a voltage inverter: an instrument developed to power automobile radio receivers. The inverter used a mixture of mechanical and electrical means to produce the required direct-current high voltage. The receiver and transmitter chosen by Horner were small and compact by the standards of the age; each was about the size of a toaster. The equipment fitted neatly onto a small table with the batteries tucked underneath or it could be built into a bookcase. Outside the building on a tower, or perhaps on top of a roof, was the wind-powered generator.

The small size of the complete station and its simple inexpensive equipment were important factors. It did not take up too much room in cramped living quarters and was easy to transport and install. The choice of compact equipment, however, meant that two important compromises had to be made. First, the sets could not transmit or receive voice communications; they used International or Morse code. Second, the transmitter was low powered. It only had an output of twelve watts, little more than a modern CB set. The use of code to send the signals instead of voice offset the limitation of low power. Experience was to show that the transmitter had a long range when atmospheric conditions permitted. In spite of this, messages could not be received at the Company's offices in Winnipeg with any regularity. Arrangements were therefore made for the posts to communicate directly with their nearest Canadian government radio station so as to en-

sure reliable communications. Arctic Bay, for instance, was to use the government station on Nottingham Island, several hundred miles to its south. The government stations acted as relay points, saving messages for the Company's trading posts until they called in at certain scheduled times and then forwarding their telegrams. Because Arctic Bay had been designated a weather station, its schedule required daily calls at 5:45, both morning and evening.

The Arctic Bay radio was installed for Alan Scott in September 1937 by George Horner and the ship's carpenter, Clem James. One of the first messages sent out by Scott was a proposal of marriage to Eileen Wallace. She accepted by letter and the following year travelled north on the *Nascopie*. The two were married by the Anglican Bishop of the Arctic, A.L. Fleming.

The network expanded from four stations in 1937 to fifty-four by the summer of 1939. Unexpectedly, they had a much greater impact on domestic life in the Arctic than on the Company's commercial operations. Almost from the beginning the sets were installed in the living quarters, sometimes in the apprentices' bedrooms. At first, it was the apprentices who used to spend several hours each evening communicating with friends at other posts but soon the manager of the post and his wife and often some of the Inuit employees learned code and were using the sets. Because the manager and the apprentices had to go on extended journeys away from their posts, their wives in particular became adept at radio operation. For the women, radio significantly reduced one of the worst aspects of life in the North, its isolation.

Invariably the sets were used soon after their installation for emergency calls. Often the post managers used their radios to talk to the Canadian government doctor attached to the station at Chesterfield Inlet. One post reported sending over 12,000 words in International Code in a year on medical matters alone. Most of these messages concerned health problems in the Inuit and Indian communities. When satisfactory treatment could not be given at the post, the manager was to call in a plane to fly his patient out to hospital. The records show that many of the first flights into northern posts were mercy missions. The radio operator at the post would inform the pilot of local weather conditions and tell him where to land. The existence of the radio sets significantly speeded up the expansion of air service into Canada's North.

The Scotts themselves provide an example of how quickly the new facility became an important factor in the lives of those at the northern posts. Their daughter was born on 6 July 1939, just two days before the *Nascopie* was due to sail from Montreal. Eileen Scott was attended at her daughter's birth by two Inuit midwives while Alan Scott received medical advice from the doctor at Chesterfield Inlet, via his radio. After the

Transferring the Wincharger at Arctic Bay from the dwelling house roof to a 20-foot tower, September 1938. At right is the weather instrument box. The post was the most northerly radio and weather station in Canada at the time.

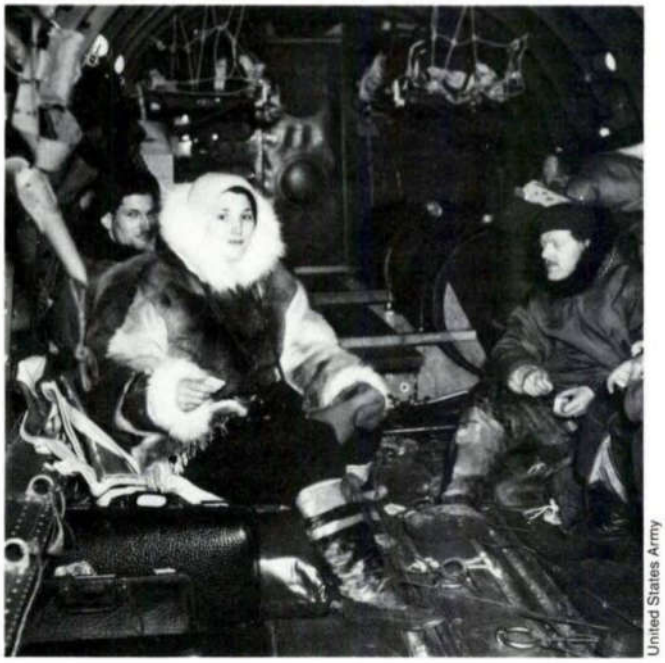
F. Flood

The Scott family at Arctic Bay, September 1939, with the indispensable radio.

birth, the Scotts were able to send south by radio an order for a complete layette, specifying the colour — pink. The baby clothes and other supplies were purchased by friends just in time to be loaded onto the steamer and be delivered in September. A few years earlier, the Scotts would have waited over a year for their order to be filled.

Probably the most dramatic use of the combination of radio and aircraft for rescue purposes occurred in 1943. The Company had opened an isolated post, Fort Ross, on the shore of Prince Regent Inlet where pack ice often made access impossible. In the summer of 1942 and again in 1943, the *Nascopie* failed to reach the post. With insufficient food, fuel and supplies left for the winter of 1943-44, the decision was made to attempt a rescue of the manager, Bill Heslop, his wife Barbara and Darcy Munro, the clerk at the post. One of the largest transport planes in the United States Army Air Forces was used to fly two trips into Fort Ross. The trading post was at the extreme limit of the aircraft's range for a return flight. The first trip carried in supplies which, along with a man to help Bill Heslop choose and prepare a landing site, were parachuted to the beleaguered post. A few days later, the rescue mission was successfully completed when the plane landed on the smooth ice of a nearby lake. The trip was touch and go! Bad weather was moving in fast and, because of weight, the Heslops and Darcy Munro had to leave most of their personal belongings and a pet husky behind. The task would have been impossible without the radio set at the post and the wind-powered generator that kept its batteries charged. The radio provided all the information needed by the pilots before they took off and its signals guided the aircraft during the long flight north. In the two years or more that the post had been inaccessible, the radio had provided the Heslops and Darcy Munro with their only link to the outside world.

Darcy Munro (left), Barbara and Bill Heslop inside the U.S. military transport plane just after their rescue from Fort Ross, 7 November 1943.



United States Army

In the spring of 1940 the fur-trade radio network was integrated into the war effort by the Canadian government. Personnel at selected radio-equipped posts in the eastern Arctic were enrolled in the Aircraft Detection Corps and given the task of reporting strange aircraft, thereby guarding against the possibility of an air raid. The daily weather information provided by some of the posts greatly increased in importance after the decision was taken in 1942 to fly aircraft directly across the Atlantic. To enable meteorologists to make more accurate forecasts, the number of posts supplying data was increased. At Arctic Bay, and a few other posts, the Meteorological Service established permanent bases with gasoline-powered generators, powerful radio sets and teams of specially trained observers. These stations provided hourly reports to weather forecasters in the South. The Company was asked to provide buildings and help to supply these bases. In most of the posts, however, Company personnel, rather than government employees, took on the job of collecting the additional information. Depending on their locations, these people read their instruments three to ten times daily and then transmitted the data to their control stations at strictly scheduled times. This was a considerable amount of additional work. Most of the posts concerned were small — a manager and a clerk or an apprentice and perhaps their wives. The women played a key role when the men were away by taking over the task of data collection and transmission.

The use of radio and radar grew rapidly during the war and led to increasing amounts of research into the properties of radio waves. One important line of investigation was the ionosphere and its effects on radio transmissions. The Arctic was chosen as the best location for this research. Once again the Company was asked to provide assistance. Using the specialized skills of its employees, it designed and constructed a series of prefabricated buildings to house the scientists and their equipment. The Company then erected the research station at its post at Clyde, on Baffin Island, three hundred miles north of the Arctic Circle. With the addition of a United States Air Force radio station at the same site, this Hudson's Bay Company trading post came to resemble a small village.

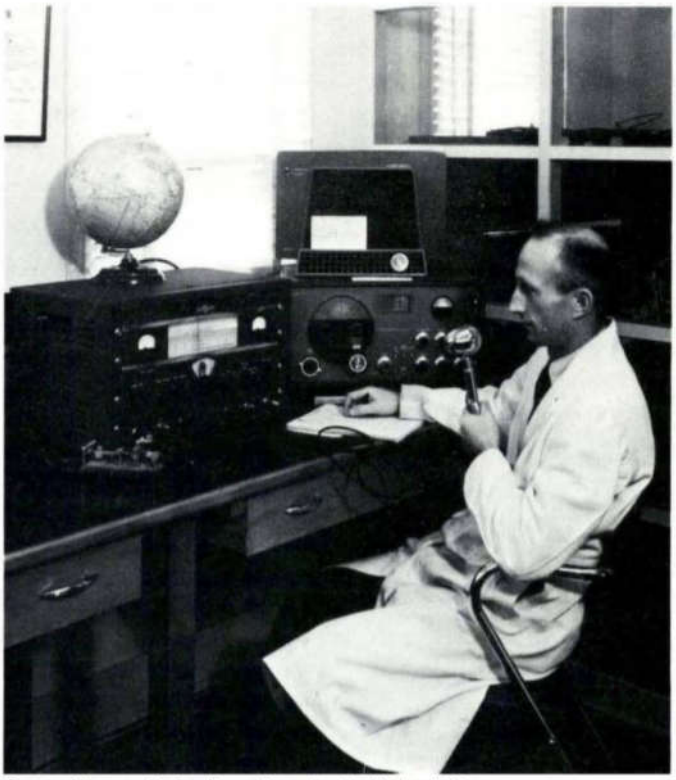
By the end of the war, all of the Company's 101 northern trading posts were equipped with radio transmitters and receivers. Because it was no longer possible to find the time to train personnel in Morse Code, the

Company introduced voice equipment in the late 1940s. Then, in the early 1950s, the problem of interference from other stations severely threatened the reliability of the network. George Horner therefore carried out yet another series of experiments and came to the conclusion that a switch from amplitude to frequency modulation or single side-band (SSB) was the answer.

The network was by now so important to the business of the Company and the well-being of its personnel, there was no question that the large sum of money required to re-equip the posts would be forthcoming. By 1959, the Company owned the largest and most northerly single side-band radio network in the world. It was for this pioneering work that, in 1956, George Horner was elected a Fellow of the American Institute of Radio Engineers. The move to SSB transmission provided the Company with a private, interference-free communication system of enhanced range and clarity. But telecommunications are a rapidly changing field and when George Horner retired in 1970, there were only seventy-two stations left in the network. The radio sets were being replaced by telephone microwave systems, a process that has continued through today with satellite communications which brings television to the most isolated communities. Although a few trading posts still have their radio sets, there is no longer a formal network and there are no scheduled calls made to the government radio stations, many of which have been closed.

The creation of the fur-trade radio network led to radical changes in the lives of Company employees and their customers. The ability to monitor the course of trade and change store tariffs undoubtedly assisted the Company to adjust to the economic fluctuations of the depression and the war. The radio transmitters and receivers broke down the communications barrier and eased travel by speeding up the use of aircraft. Both the radio sets and the aircraft significantly improved medical services in the Canadian North in the same way as they had in the Australian outback, even though no official 'Flying Ambulance Service' was ever created in Canada. The Company's northern personnel and their families made an important contribution to Canada's war effort by joining the Aircraft Detection Corps, collecting weather data and supporting major research efforts. All this would have been impossible without some means of communication with the outside world. (In contrast, the Company's arctic posts did not hear of the outbreak of the First World War until September 1915.)

Above all, radio had the greatest effect upon family life. Radio gave the wives of Company personnel a means of relieving their sense of isolation by increasing their social and business contacts and allowing them to communicate with far-off family and friends.



George Horner, chief radio engineer for the Hudson's Bay Company 1937-1970, broadcasting from the radio laboratory in Winnipeg, c. 1948.

The women became particularly adept at using the sets, and came to handle much of the business and meteorological traffic. Thus, radio increased their access to business activities and gave them new and important skills.

The fur-trade radio network was a remarkable technical achievement. On the surface, it appears as if the early stations were nothing more than a collection of 'off the shelf' items. Yet this simple fact is an important point. Horner did not have the time to carry out a great deal of research into possible equipment. Nor did the Company have the capital to finance a research and development programme. The Wincharger battery sets, the automobile voltage inverters and the transmitters and receivers were items commonly available and therefore reasonably priced and with known standards of performance. What was more, spare parts for them were readily available. The network fulfilled its designed purpose well and the Company did not hesitate to continue its investment in it. To the Company's credit, there was never any attempt to limit the use of the network to Company business. All who lived in the North shared in its benefits. The fur-trade radio network was an important factor in the development of the North and the efforts of the Company and George Horner deserve to be a recognized part of northern history. ◆

Joyous works created amidst poverty, illness and personal tragedy

Photograph by Tom Humphry, Notman Photographic Archives

Wall hanging by Martha Kukshuk of Whale Cove. The mysterious symbol with the black blades appears in a somewhat similar form on an elaborate shaman's parka acquired by whaling captain George Comer for the American Museum of Natural History in New York. *(see page 29).*

Reproduction of wall hangings by permission of Issatak Eskimo Co-operative, Whale Cove.

Wall Hangings at Whale Cove

By Dorothy Harley Eber

IT WAS A GLOOMY AFTERNOON at Whale Cove — just the afternoon for the adventure of buying a wall hanging. Nothing could serve as a better antidote to gloom, I decided, than viewing examples of the art form arctic women have developed — bright duffel and stroud hangings, embroidered and appliquéd — and the fun of picking and choosing.

The door of the community's small co-operative craft shop was open and I seized the opportunity. Hours of business were sporadic because Whale Cove is one of the smallest communities in the Keewatin. It does not have the acclaimed star artists, famous for their hangings, such as Joy Hallauk of Eskimo Point, or Oonark of Baker Lake, but I had heard from friends in Rankin Inlet, administrative centre of the region, that often attractive and highly original hangings could be found here.

Inside, the craft shop was certainly a sight to raise the spirits. Hangings covered the walls and in the background were bolts of vivid duffel and here and there were beautifully made kamiks, mitts and dolls in beaded costume. The effect was warm and inviting — and coffee was on the boil.

'Have a cup,' said Maria Okalik, 19, and in charge of the craft shop while the manager was on holidays.

Maria poured and, I, sipping out of my paper cup, looked around the walls.

It was not only the weather that was oppressing spirits in Whale Cove this overcast afternoon. Two days before, two young Inuit had started out for Whale Cove from Rankin Inlet in a small outboard canoe, a considerable journey in such a small craft. By now they should have been safely home; the community was becoming worried. I had arrived the day before by plane to interview Joan Attuat, the grandmother of one of the boys, for the Urgent Ethnology Program of the Museum of Man, Ottawa. As a child this woman — now approaching her eighties — had gone along when her family went to trade with perhaps one of the last vessels to winter at Marble Island which during the heyday of whaling in the nineteenth century had been the most favoured winter harbour. I hoped to record her story of this journey and some childhood reminiscences. But that day no one felt like interviews.

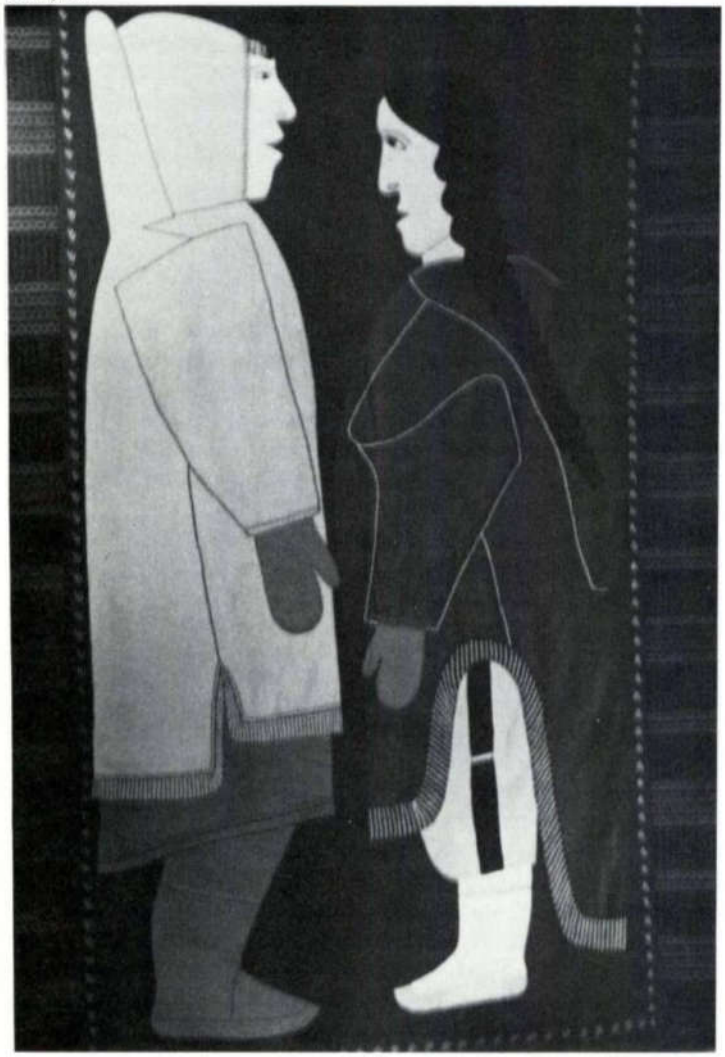
As I looked closely at the hangings on display I

Dorothy Eber

The door of the Whale Cove craft shop displays bilingual wall hangings.

Since 1968 Dorothy Eber has travelled extensively in Arctic Canada researching and writing about the Inuit and their art.

Dorothy Eber



A wall hanging by Agnes Teenar of Whale Cove features dramatic four-foot-high figures.

Dorothy Eber

Maria Okalik (left), 19, acting manager of the craft shop, and Louisa Aupilaryuk, display the hanging by Martha Kukshuk.

could see they illustrated a number of different approaches. Clearly there were many seamstresses at work. The co-op manager handed out materials and bought back the completed work, I learned, and Maria explained that actually I was looking at a backlog.

'No one is making them at the moment,' she said. 'When the manager comes back, she will give out more duffel and so on. But there are really too many hangings at the moment.'

There was certainly an excellent choice. Even in Baker Lake where by general consensus hanging-making has reached its apogee, hangings have never been as easy to market as prints and carvings. (Purchasers of these rarely stop at one example.) But as I studied the work on display it seemed to me that there were unrecognized geniuses at work. Wall hangings employ the traditional sewing skills of Inuit women and in the Keewatin where in the days of the Hudson Bay whalers (1860 to 1915) women used the beads the whalers brought for spectacular parka decorations, it is perhaps not surprising that a few seamstresses have raised craft to art and that the most acclaimed of wall hangings come from the area. Whale Cove women maintain Keewatin tradition.

(Hanging on a peg was a beautifully beaded Padlirmiut amoutik, apparently just a joyous exercise in making again an item of clothing in which women traditionally took great pride. Mary Jane Ford who had agreed to interpret for me came in and slipped the garment on; later we went and visited Eve Alakasuak who made it. Her people, the Padlirmiut from around Eskimo Point, used to make the long journey into Churchill to trade and received their beads early from the traders there. She made cut outs and drew us a picture to show how the amoutik in her region was constructed and decorated.)

Mystic Seaport Museum Inc., Mystic, Ct.

Aua, Eskimo shaman, photographed on board the whaling ship 'Era' by Captain George Comer.

These crafts and skills now often go into the making of a wall hanging. Maria began to take down hangings from shelves along the walls where many were piled up. Maria was proud of the work from her community — her father is Prime Okalik, a well known carver — and we discussed and debated the merits of each piece as it was opened up.

It was hard to choose. The shelves held the work of a considerable number of women and Maria and I went through all the shelves.

'Oh, I don't mind at all,' she said. Every now and then, after Maria and her friend — who had dropped in and joined us — had held up a piece at arm's length, we put it aside for further consideration. Soon the problem was how to select a single hanging from the pile on the table. Some large hangings had a primitive dramatic quality in the design I had not noticed elsewhere; others were amusing and humorous, and some with great quantities of stitching and appliqué — miracles of embroidery — were very beautiful. Finally, from amongst the hangings, all so brightly coloured and engaging, I chose one which seemed to me particularly joyful. It was the work of Martha Kukshuk.

The hanging was made of bright green duffel with brilliant borders of red and yellow. But what was going on? What was the object the two dancers were circling around while the bird and the bear looked on and the seals seemed summoned in attendance? Could it be a seal hole? Could it be a drum? The latter suggestion was quickly dismissed by several onlookers. 'The shaman's drum in this area never had designs or drawings on it.'

But then interpreter Mary Jane Ford, a descendant on her father's side of the well-known Labrador Ford family, who first visited the Keewatin in the last century, made an observation: 'The shamans' drums in this area had no designs but Martha and her family came down from Igloolik with a dog team.' Who knows, she suggested, what shamans in Igloolik may have had on their drums? The mystery remained but later I noted that the device with the black blades that seemed to suggest motion appeared in somewhat similar form on the famous parka, much written about, which the whaling captain George Comer bought for the American Museum of Natural History in 1902 from the well-known Igloolik shaman Aua.

As Maria wrapped up the hanging she said, 'It is almost the last we have by Martha Kukshuk.' Then she told me the artist's story. Martha Kukshuk had died a couple of years before in the aftermath of a series of tragic events.

'Her husband went out on the ice on his Honda; he thought it was strong but it broke and he was trapped under the ice with the Honda,' Maria told me. More tragedy followed. A little while later a son and a grandson were in a canoe on a lake where in the summertime young people sometimes went to swim. It was a fairly large lake and in the middle the canoe overturned. 'Some of the boys on the shore tried to go to them but it was too cold and it forced them back. If there had been two canoes they would not have drowned,' Maria explained. She added, 'She died from thinking about her husband too much.'

After the deaths some of the surviving members of the family left and went to Eskimo Point. Recently Maria heard that they may be coming back.

Rather sobered I took my hanging back to the nursing station where I was staying with a friend, Cheri Jagdeer, the nurse in charge. She had good news. The boys who had set out from Rankin Inlet had arrived; when the weather became stormy they had camped along the way and gone hunting. 'I knew that was likely the way it would be,' she said. 'But the young people have so little experience and the old people know that.'

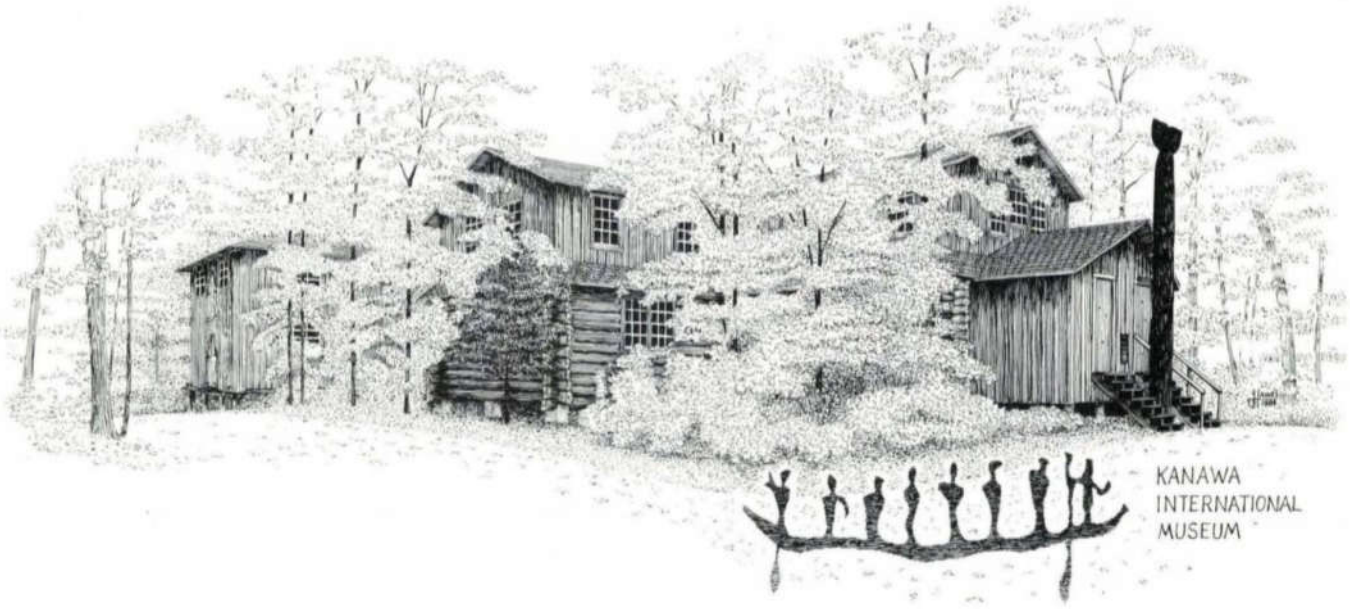
Today Martha Kukshuk's hanging adorns a white wall in my apartment in Montreal. Its bright colours seem to cheer up many a gloomy day. But when I glance at it, as I frequently do, a variety of thoughts occur. It reminds me that Inuit women still help maintain their families by means of their needles; that many create their usually joyous works amidst poverty, illness and personal tragedy. It brings to mind, too, that though the shamans and snowhouses are largely gone, the North retains many age-old dangers — and new ones besides. ◆

Reprieve for the Fur-trade Canoe

By Michael Buss

Michael Buss is a wildlife biologist for the Ontario Ministry of Natural Resources; he has had a longtime interest in fur-trade history and outdoor living.

Photographs are by the author.



Kanawa International Museum houses 600 canoes, kayaks and dugouts; it is the achievement of Professor Kirk Wipper of the School of Physical and Health Education, University of Toronto.

THE OLD FUR-TRADE ERA which passed with the settling of Canada and the development of modern transportation allowed a colourful mode of travel, the fur-trade canoe, to fade into memory and obscurity. But with the renaissance of old crafts and skills in the last decade has come a reprieve.

At the Kanawa International Museum, near Minden, Ontario, Rick Nash, a recently immigrated American, has constructed a completely functional fur-trade canoe, exact in every detail to the best canoes ever described by fur-trade travellers. Few original canoes of the fur-trade era survived the rigours of their use.

Kanawa, situated among lakes, granite hills, and the great hardwood forests of the southern Precambrian shield area of Ontario, is an all too obscure museum. Its rambling log and timber frame buildings house an astounding 600 canoes, kayaks and dugouts, the achievement of Kirk Wipper. Wipper began thirty years ago accumulating interesting old canoes through friends who felt the same love for canoeing as himself. Like many visionaries, Wipper's interests consumed much of his time and money over the intervening years. To his credit is Kanawa, undoubtedly the most significant collection of historic and contemporary bark canoes in North America.

It was this collection of canoes which lured Rick Nash and his family from Massachusetts to Kanawa, 35 km north of Minden, Ontario. Nash was curator of the collection and documented every rib and stitch of the fragile bark craft housed there.

Although the museum contains many turn-of-the-century and modern canoes, Nash's interests and devotion were to the birch-bark canoes and skin kayaks. His appreciation of the canoes was born out of empathy for their builders, because he too laboured with bark and root and tree.

Nash learned his craft from the acknowledged authority of modern birch-bark canoe builders, Henri Vaillancourt of Greenville, New Hampshire. Since Nash's apprenticeship, he has honed his skill to rival his mentor's. The availability of the Kanawa collection for reference has played a significant part in Nash's maturing and refining his technique. He built eight canoes during his three years of employment at the museum. His summers were spent in building and his winters in restoring and documenting the museum's collection. Although Rick Nash is no longer employed by the Kanawa Museum, he still lives nearby managing his own growing business in custom-made canoes, paddles and snowshoes.

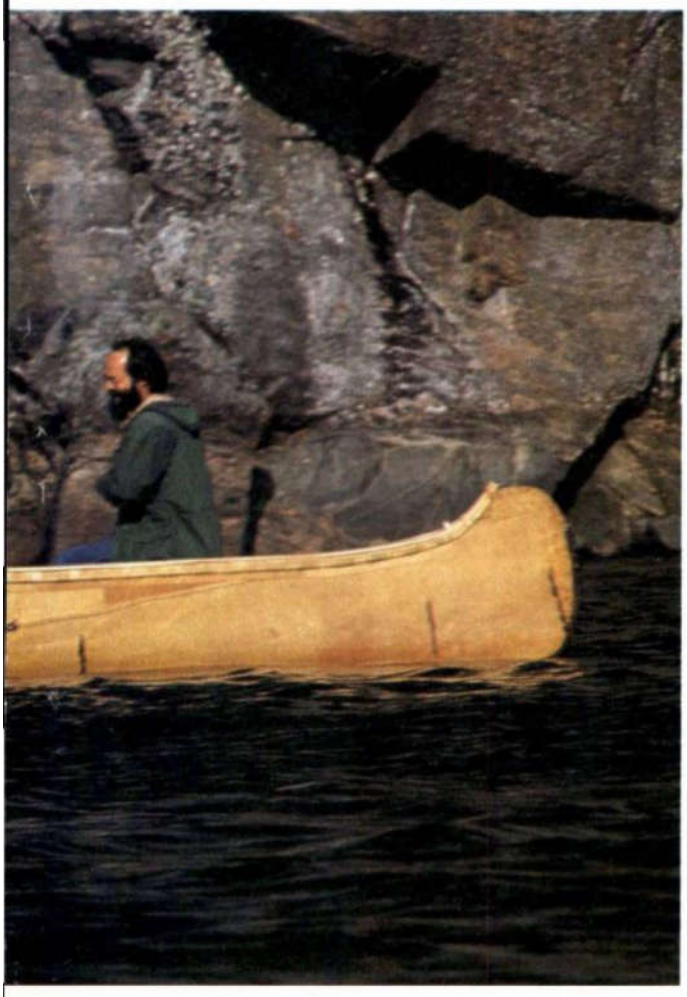
Nash undertook his most ambitious project to date in the spring and summer of 1981 with the construction of a 28-foot fur-trade canoe. Actually the project began in the fall of 1980 when Nash began locating the materials which would be used in the construction.

At the top are the tools of the craftsman: a crooked knife and a straight carving knife. Middle and below, the building frame and the frame weighted with rocks.

The ribs are bent over the knee by Rick Nash, then stored in pairs and tied with lampwick until required.

Spruce or pine roots — clean and split — provide the cordage to sew the sheets of bark together. The application of pitch is the final touch.

Ottawa River canoe of 1981 on its maiden voyage near Dorset, Ontario.



Trees of white cedar for ribs, planking, stem, inwale and outwale were selected and noted for future cutting. A good deal of gazing upward and hiking was involved in finding large, knot-free trees with straight grain. The collection of bark, wood and watap (the spruce-root cordage used to sew the canoe together) was completed by the late winter and then the shavings began to fly. With the aid of an axe and a crooked knife — a hand-held tool which functions as a primitive plane when drawn toward the user — the splints of cedar were fashioned into 25 matched pairs of ribs. A building frame was constructed early on in the project which would aid in the initial formation and lay-out of the birch-bark.

In the first warm days of spring 1981, the bark was staked up around the edges of the building frame, which was weighted down by rocks, to allow Nash to sew the sheets together. Then came the addition of inwale and outwale which were whip-stitched to the birch-bark, and together form the complete gunwale. The bark from three trees was required to form the outer skin of the canoe.

There seems to be a popular misconception that native crafts, particularly bark canoes, were crudely executed affairs born out of a make-do material culture. There is nothing crude or makeshift about the expertly crafted original Malecite or Montagnais canoes in Kanawa's collection. There is nothing crude about Nash's workmanship or his finished product either. His results are clean, symmetrical lines and consistent blemish-free workmanship.

Once the sewing of the bark and attachment of the gunnels has been completed, the craft begins to take on the familiar line of the canoe. It is the time Nash himself likes best in the building process. Although much work remains, he can now visualize the end product. It is no longer bundles of ribs and rolls of bark. The cedar ribs, shaped and stored since early spring, are now arranged in order for placement. The planking is made ready, for it is installed as the ribs are put in. At this point in the construction, Nash's skill shines. Experience and planning now produce the final classic flow and sweep which is the mystique of the canoe. Taut as any canoe built by modern methods over a form, there is nothing make-do about this craft. Pitching the seams completes the final construction stage. All that remains is the baptism which the canoe receives in a nearby lake.

And who says we don't have the time or the skill to re-create the craftsmanship of the past? Visit Kanawa and compare for yourself the collection and this product of a contemporary craftsman. ◆

Drilling rig at Norman Wells where the first oil well was drilled in 1920. By 1943, when development started on the Canol project, 42 wells, most of them producing, had been drilled in the Norman Wells oilfield.

From man-made islands in the historic Mackenzie River, a new development of the vast oil reserves beneath is underway.

Boomtown Norman Wells

By Peter Boothroyd

THE HAMLET OF NORMAN WELLS — located about 1,500 kilometres northwest of Edmonton in the Northwest Territories — is not today a typical small, northern community with a slow-paced way of life. Situated about 100 kilometres south of the Arctic Circle on the impressive Mackenzie River, it is the scene of an adventurous $600 million undertaking by Esso Resources Canada to develop a large part of a 100 million cubic metre oil reservoir lying directly beneath the Mackenzie River.

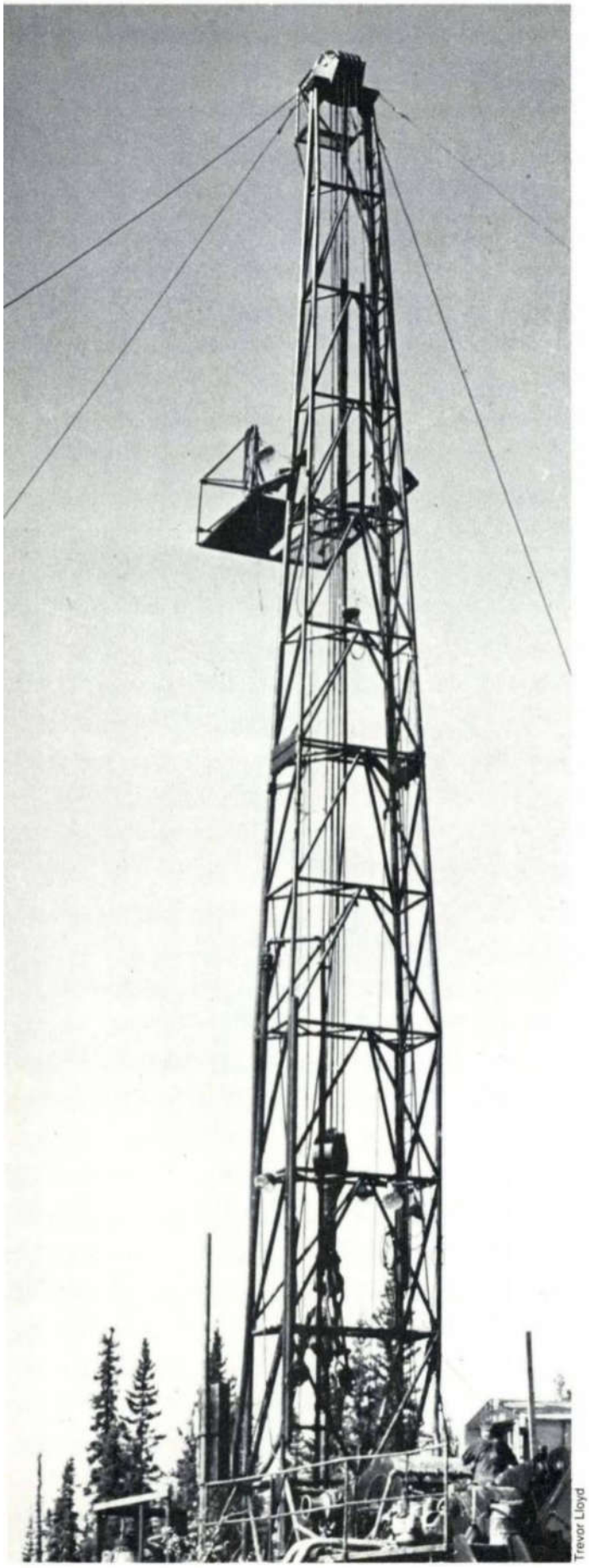
Unlike most northern settlements on the Mackenzie River, Norman Wells did not start out life as a fur-trading post. Its only link with the fur trade is its name shared with Fort Norman, its closest neighbour about 75 kilometres upstream. Fort Norman was associated with the old North West Company more than 175 years ago. 'The Wells', as the community is known by residents in the region, owes its beginning to one simple but valuable commodity — oil.

Sir Alexander Mackenzie documented the occurrence of oil back in 1789 while exploring the river bearing his name. In his *Journal*, he refers to 'pieces of petroleum like pieces of yellow wax' present in the rubble at the base of a steep river bank. For many years, this material served as the principal supply of 'pitch' to the fur traders for caulking their canoes. Since there was only a limited need for the product, the occurrences of oil seepages in the Mackenzie River valley were known to only a few.

In 1911, Lewis Conibear, an engineer on a Mackenzie River supply boat, reported that 'oil was floating in greenish-blue slicks on the water and here and there oozing from the river's bank'. The following year, he apparently staked claims for himself and his employer, the Oblate Fathers, but unfortunately for him, never registered them. Also in 1911, J. K. Cornwall, a fur trader with the Northern Trading Company, hired an Indian named Karkesee to find the source of all this oil. Karkesee located several pools and brought back samples which were later analyzed in Pittsburgh and found to be similar to Pennsylvania oil. In spite of this, however, Cornwall was unable to arouse sufficient interest in commercial exploitation of the oil.

Three years later, a Calgary-based syndicate retained Dr T.O. Bosworth to stake three claims at the mouth of a tributary to the Mackenzie River. Originally called Oil Creek, this tributary was subsequently named Bosworth Creek and now bisects Esso's property at Norman Wells. World War I interrupted investigations and in 1918 the claims were acquired by

Wildlife biologist Peter Boothroyd of Winnipeg is with the Western and Northern Region of the Canadian Wildlife Service.



Trevor Lloyd

the Northwest Company, a subsidiary of Imperial Oil Limited.

In July 1919, the company sent a party of eight men to where the first well was to be drilled on the claims. They left Edmonton by train and travelled to the end of the line before transferring to a river boat. Eventually they arrived at their destination two months later having hauled their awkward equipment over 1,500 kilometres including some rocky portages over 25 kilometres in length. Drilling began with their 'ox-powered drill' at what was appropriately named the Discovery well. The well had the distinction of being the first one to be drilled in the Northwest Territories. By midwinter, the first showing of oil was encountered. On 23 August of the following year, more oil was located and at a depth of 239 metres oil rushed to a height of 21 metres for 40 minutes, proving the richness of the find. This represented the first major oil find in Canada since James Miller Williams opened the Ontario oilfield in 1857. News of the discovery spread and, during the winter of 1920-21, a staking rush occurred at Norman Wells with dog-teams arriving from as far away as Edmonton.

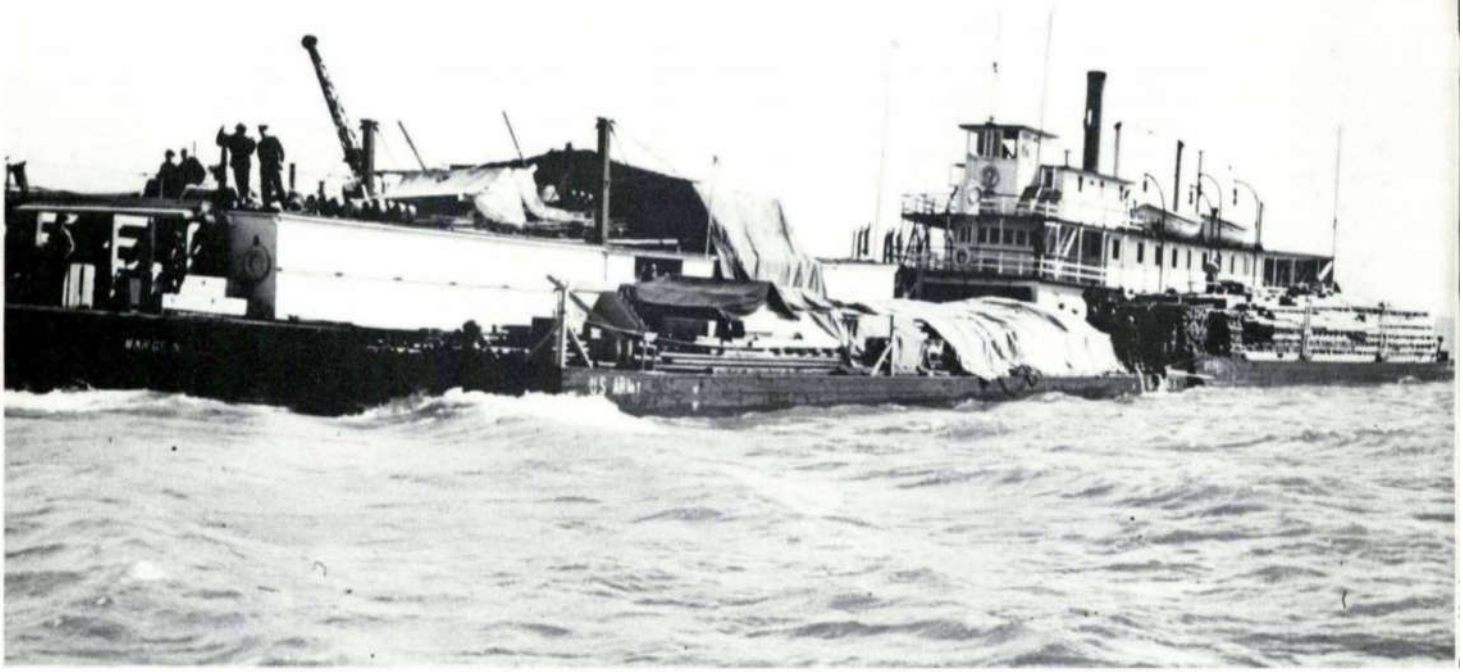
The well was brought into production in the fall of 1921. At that time, a small refinery was built which had a daily capacity of 48 cubic metres and was capable of producing gasoline and diesel fuel. Production, however, was short-lived; the local market failed to develop, the refinery was shut down and in 1924 the six wells drilled up to that point were capped.

The shut-down did not last long. Local demands for oil suddenly increased when silver and radium were discovered at Great Bear Lake in 1930. Five years later, gold was struck at Yellowknife. To meet the resulting growth in the northern market, Imperial Oil built a new refinery at Norman Wells in 1939 having a capacity of 79 cubic metres a day. In 1940, two new wells were brought into production and during 1941 total production reached over 3,800 cubic metres.

That year the Japanese attacked the United States naval fleet at Pearl Harbour on 7 December. This incident and the subsequent Japanese threat to Alaska posed by the occupation of the outer Aleutian Islands resulted in an incredible expansion of the Norman Wells oilfield. The United States Army needed a secure source of fuel for defence against further aggression in the Northwest. The shelling of a refinery in California and heavy shipping losses showed that existing Pacific coast sources could not be relied upon. Attention turned to northern Canada, and with prodding from arctic explorer Vilhjalmur Stefansson, the United States Army decided to link the Norman Wells oilfield by pipeline to the Alaska Highway. By the end of April 1942, agreement had been reached between the United States Army, Standard Oil and Imperial Oil to launch the mammoth Canol Project. It is of interest

In May 1942, the United States War Department notified the Hudson's Bay Company that it had 30,000 tons of freight — as well as troops and civilian workers — to ship from Waterways to Norman Wells. That summer the Company's fleet of stern-wheelers, tugs and barges moved most of it, as well as their scheduled shipments to fur-trade posts and mining companies.

The first load of Canol freight navigating a tricky part of the Athabasca River in early June. On the left, HBC barge 301, with oil-well casing pipe and the first two bulldozers. On the right, a Company load for the fur trade.



The Company's sternwheel steamer 'McKenzie River', heading for Norman Wells with five HBC and Canol barges.

Trevor Lloyd

Company barge 204 docks at Fitzgerald, carrying a United States Army field hospital with fifty beds and six doctors.

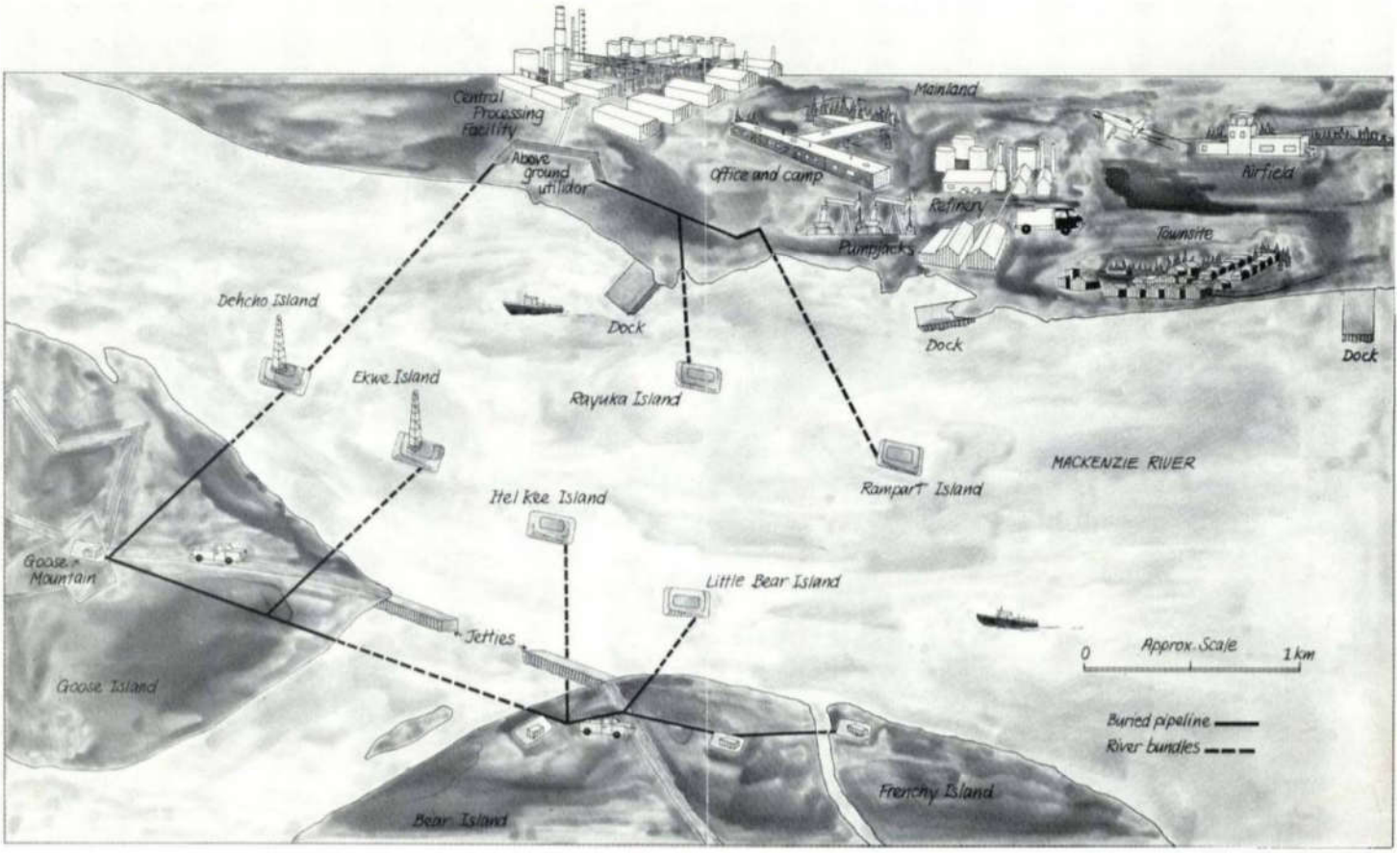
that the key decisions on the Canol Project — although at least one authority claims that Canol is an acronym for Canadian-American Norman Oil Line, it is generally believed to stand for 'Canadian Oil' — were made before the Canadian government or United States State Department were informed. In fact, only more recently has the public at large come to know more about the project because it was constructed during World War II as a military secret and was not publicized. Also, it was short-lived and developed into a political and financial embarrassment to the Americans.

The project consisted of several components. A 560-kilometre pipeline (part 10 centimetres and part 15 centimetres in diameter) with a capacity of 477 cubic metres a day was built between Norman Wells and a new refinery at Whitehorse in the Yukon. Other pipelines carrying the refined petroleum products from Whitehorse were also installed: a 10-centimetre pipe along the right-of-way of the White Pass and Yukon Railway to the Pacific coast port of Skagway, a 7.5-centimetre pipe along the Alaska Highway to Fairbanks, Alaska, and a 5-centimetre pipe from Watson Lake to Carcross where it joined up with the Whitehorse to Skagway pipeline.

Soon after the Canadian government gave the go-ahead to the project, men and materials were dispatched to Norman Wells. Many additional construction projects were necessary in order to complete the pipeline system: barges, tugs and docking facilities had to be assembled; eight landing strips had to be laid

C. P. Wilson

Road scrapers await shipment to Norman Wells in the yards at Waterways.



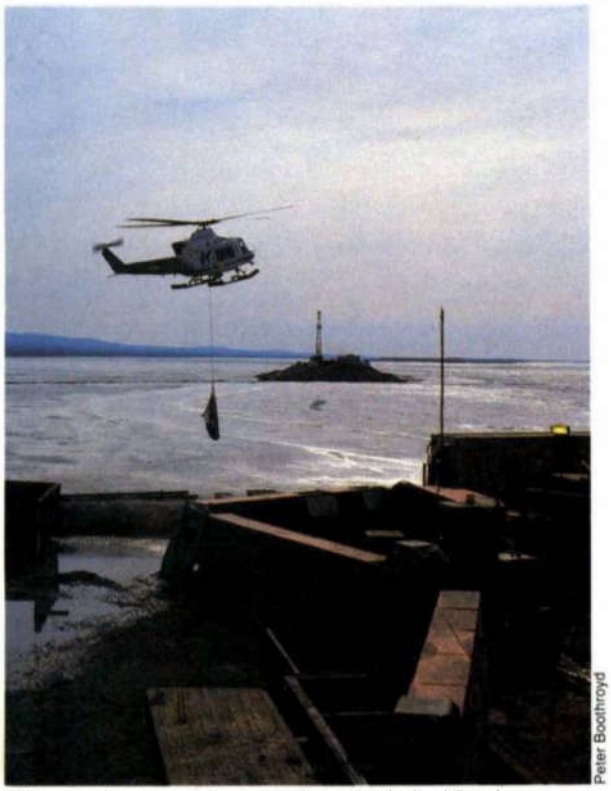
The Norman Wells Expansion Project. Map by permission of Esso Resources Canada Limited.

out; 763 kilometres of telephone line had to be strung. Sixty more oil wells were put into production which required the building of 320 kilometres of summer and 483 kilometres of winter roads. By the end of the project, an additional 2,415 kilometres of winter road and 763 kilometres of new all-weather road had been built and 2,512 kilometres of pipeline had been laid. The Mackenzie River had to be crossed and a tank farm built at Camp Canol on the opposite side of the river from Norman Wells to supply the pipeline to the Yukon. All this took place in less than two years between September 1942 and February 1944 — an incredible engineering feat.

Contrary to what the short construction time might imply, the project was no easy task. Many hardships were encountered due to the harsh climate and extremely difficult working conditions. Diesel fuel froze to the consistency of vaseline; the best grade of antifreeze available at the time went solid in the cans. Tracked vehicles, used to pull sledded freight carriers and mobile living quarters along the pipeline route, sometimes stopped as often as every 15 minutes because of ice in the fuel system blocking off the fuel supply. The intense cold caused the sleigh runners to become brittle and snap. Motors had to be kept running 24 hours a day: turning them off would have meant stopping them for good.

The engineers soon discovered by hard experience that construction practices they were used to in the South did not work in the North. The most severe problem they ran into was ice-rich permafrost — permanently frozen ground that does not thaw in the summer — which was common along the route. In these ice-rich areas, excavation of every hole for telephone poles, for example, had to be blasted with dynamite. In addition to the ice, workers had to contend with soggy muskeg, narrow canyons, wild streams and the rugged Mackenzie Mountains which separated Camp Canol from Whitehorse. Eight hundred and twenty culverts were installed, 65 pile-driven bridges were built and over 500,000 cubic metres of borrow material had to be excavated for road surfacing and filling.

Oil first arrived at the Whitehorse refinery in mid-April 1944. Between July and November of that year, the project provided all the motor gas requirements of the military between Watson Lake and Fairbanks. As well, between 21,600 and 38,800 cubic metres were exported from Skagway. An efficient system, however, it was not. The original cost projection of $25



Peter Boothroyd

Helicopter slinging supplies to Esso's artificial island Rayuka; Rampart Island is in the background. May 1984.

million in 1943 had soared to an estimated actual cost of $135 million. Average cost of the petroleum products produced at the Whitehorse refinery was $106 per barrel. By comparison, California oil shipped to Whitehorse by tanker and the Skagway pipeline cost $3.94 per barrel. On top of that, it has been calculated that, of the total amount of oil pumped from Camp Canol (184,647 cubic metres), only 154,485 (84%) ever arrived at Whitehorse. Certainly, at least 7,330 cubic metres are known to have spilled.

On 8 March 1945, only 11 months after oil was first received at Whitehorse, the project was shut down. The reason? The Japanese threat had receded and the expensive oil was no longer needed. The Whitehorse refinery was eventually shipped to Edmonton and salvage operations on the Canol line removed vehicles, machinery and most of the pipe. Today, there are still barrel caches, vehicle dumps and remains of camps along the route. Production at Norman Wells returned to pre-World War II levels, governed once again by local demands.

This situation remained until Esso recently proposed to develop a large part of the 100 million cubic metre Norman Wells oil reservoir lying directly beneath the Mackenzie River. The oilfield expansion project, given the go-ahead in January 1981, involves

Rampart Island, and in the foreground the massive concrete blocks that protect Rayuka from the movement of ice in the spring, May 1984.

Peter Boothroyd

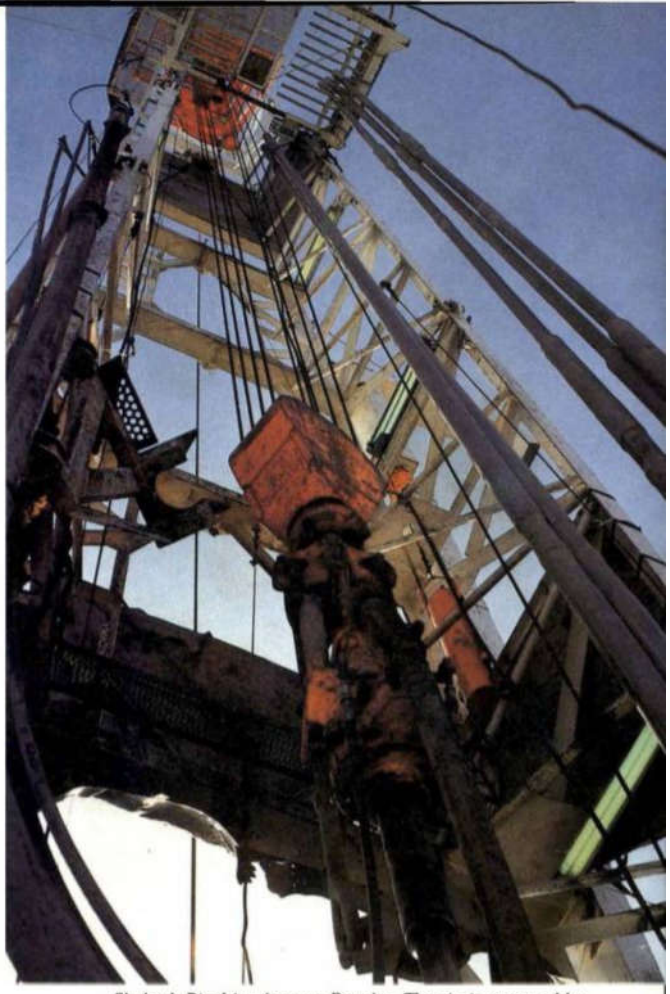
the construction of six artificial islands in the Mackenzie River between the mainland and two natural islands — Bear and Goose islands. Almost ninety new wells will be drilled from the man-made islands and about 75 more will be drilled on the mainland and Bear and Goose islands. Pipelines buried in trenches in the riverbed are used to gather the oil produced at the island wells and move it to a new processing facility being built near the existing refinery.

Production from the Norman Wells field will increase ten-fold from the present 475 cubic metres of crude oil a day to 4,400 cubic metres a day. The Norman Wells refinery will continue to take the 475 cubic metres a day which is barged down the river to supply the oil needs of communities such as Inuvik, Tuktoyaktuk and Sachs Harbour in the western Canadian Arctic. The remainder will be pumped down a new 30-centimetre diameter pipeline to Zama, Alberta. From there it will travel through the existing pipeline network to southern refineries. Oil is expected to be moving down the 860-kilometre pipeline, being built by Interprovincial Pipe Line (NW) Ltd., by 1985.

The scale of the operation is impressive. As much as three million tonnes of limestone rock had to be hauled out of the quarry near Norman Wells for the project — about 100,000 tonnes was used to construct each man-made island. The rock was laid on the riverbed in the winter by dumping it through slots cut in the ice. In the summer, the 'rock rings' were filled with sand dredged from the river to build the islands 11 metres above the summer level of the Mackenzie River. Large rocks and concrete blocks were then used to armour-plate each island and provide protection against the strong forces of river ice and currents experienced during spring breakup. A new road had to be built to handle the large 56-tonne trucks used to take all the rock from the quarry to the island locations below the ice — the existing road couldn't take the heavy traffic.

Each island supports a drilling rig, a 30-person camp and drilling supplies and equipment. In order to drill many different wells from the same island, several wellheads are located about two metres apart in a covered trench. On the island surface each well is drilled at a different angle away from the island — this technique is called directional drilling and allows as many as 20 wells to be drilled from each island.

When the project was being examined by government authorities for the possible effects it might have on the environment, many people were concerned that the islands would not be strong enough to withstand the immense forces exerted by the large sheets of ice and strong currents which occur in the spring. There were visions of islands being destroyed, pipelines snapping and hundreds of litres of oil gushing down the river coating everything that stood in the way.



Shehtah Rig 1 in place on Rayuka. The rig is operated by Shehtah Drilling Ltd., a joint venture between Esso and Dene/Metis corporations.

One of the scenarios people were afraid might occur was the possibility of a large oil spill occurring in the spring when thousands of ducks and geese pass through the Norman Wells area during migration to their northern nesting grounds. Esso has given assurances that many years of work had been devoted to making sure that the islands were designed to take a real beating without falling apart. While these assurances seem to have had the desired consoling effect, there is still the issue that all the activity and accompanying noise at the new islands and on Bear and Goose might be enough to discourage waterfowl from using the Norman Wells area. Studies are being conducted by government and Esso to see if these fears have any basis.

Of all the waterfowl seen in the spring at Norman Wells, the snow goose is probably the most impressive and the object of most concern. Literally thousands of snow geese have been known to touch down at the islands in the vicinity over a two to three week period in May — over 22,000 were counted one day in 1972. After a long journey from their wintering grounds — as far away as California and Mexico — the geese divide up their time between resting and

© Peter Boothroyd

More than half of the 40-man crew on Shehtah Rig 1 are Indian, Metis or Inuit; the objective is to operate Shehtah Rig 1 with a full native crew.

feeding. It is important for them to build up their energy reserves before continuing on down the river on the next leg of their long flight to their nesting grounds on the Beaufort Sea coast in the western Arctic. Not all islands in the Mackenzie River are attractive to the geese. They tend to concentrate where there are mudflats and open water areas and where there is very little in the way of vegetation. They show little interest in islands which are almost completely forested with spruce and birch. But low-lying islands with low willows and birch — mixed in with grasses and sedges — are favourite spots for the geese, particularly when they have muddy shorelines and mudflat areas. The geese like to feed on roots of aquatic plants such as sedges and horsetails and also seem to be partial to willow catkins. The availability of food is good on Goose Island which is almost totally devoid of trees, and this is one of the main reasons this island is so well used by snow geese.

Once construction work on the oilfield expansion began and workers started arriving, concerns became more focussed on the effects of the project on the community of Norman Wells. The hamlet is home for roughly 400 residents and with an anticipated influx of 1,200 workers, hamlet administrators have been understandably a little anxious. With such drastic fluctuations in population, planning for the community's future is challenging to say the least. Strange though it may seem to people in southern Canada, land is in short supply and housing is thus scarce and expensive — in 1983, homes were selling for about $100 per square foot! The problem stems from the fact that the hamlet can only grow in one direction — expansion in the other directions is prevented by the Mackenzie River, the property occupied by Esso's facilities and the hamlet's airport. In addition to the housing shortage, the recently built school is already nearing capacity and improvements to water and sewer servicing are hampered by sparse funds.

Esso has made a commitment to make sure that opportunities exist for northern residents to take advantage of the employment and business created by the expansion project. Over 1,000 northerners worked on the expansion project in 1983 which on average represented just under half of the total work force. Necessary skills have been developed through on-the-job training which emphasizes longer term career possibilities in operating and maintaining Esso's facilities. One of the most significant achievements has been the formation of Shehtah Drilling Ltd. The company is a joint venture between Esso and Dene/Metis corporations and for the first time native groups have ownership in a drilling rig which has been put to work on one of the artificial islands in the Mackenzie River. Over time, native people will acquire training in running the business so that they can take over those duties. Shehtah's success will depend on its performance and on its ability to cope financially and to meet the expectations of native community leaders.

Established northern businesses have also been able to take advantage of the expansion project. Over $70 million have been awarded in contracts to northern businesses since the project began. In the Norman Wells area alone, 43 businesses received $24 million in contracts in 1982 and 1983.

While no one can deny that the expansion project has generated many business opportunities and has stimulated the local and regional economy, some local businessmen are still concerned that, once all Esso's facilities are in place and construction winds down, there will not be enough work to go around. Some businesses that have sprung up since the expansion project began will have to compete for the smaller piece of the pie that will remain when the expansion is complete.

Industry, government and northern residents are watching the Norman Wells experience with a critical eye. The oilfield expansion project is basically a large-scale experiment — it is hoped that it will stand as a model of how industrial projects can be carried out without environmental and social disruption and at the same time have economic benefits for local residents. One thing is certain — Esso's project has once again placed Norman Wells firmly on the map. ◆

Catherine II, Empress of Russia.

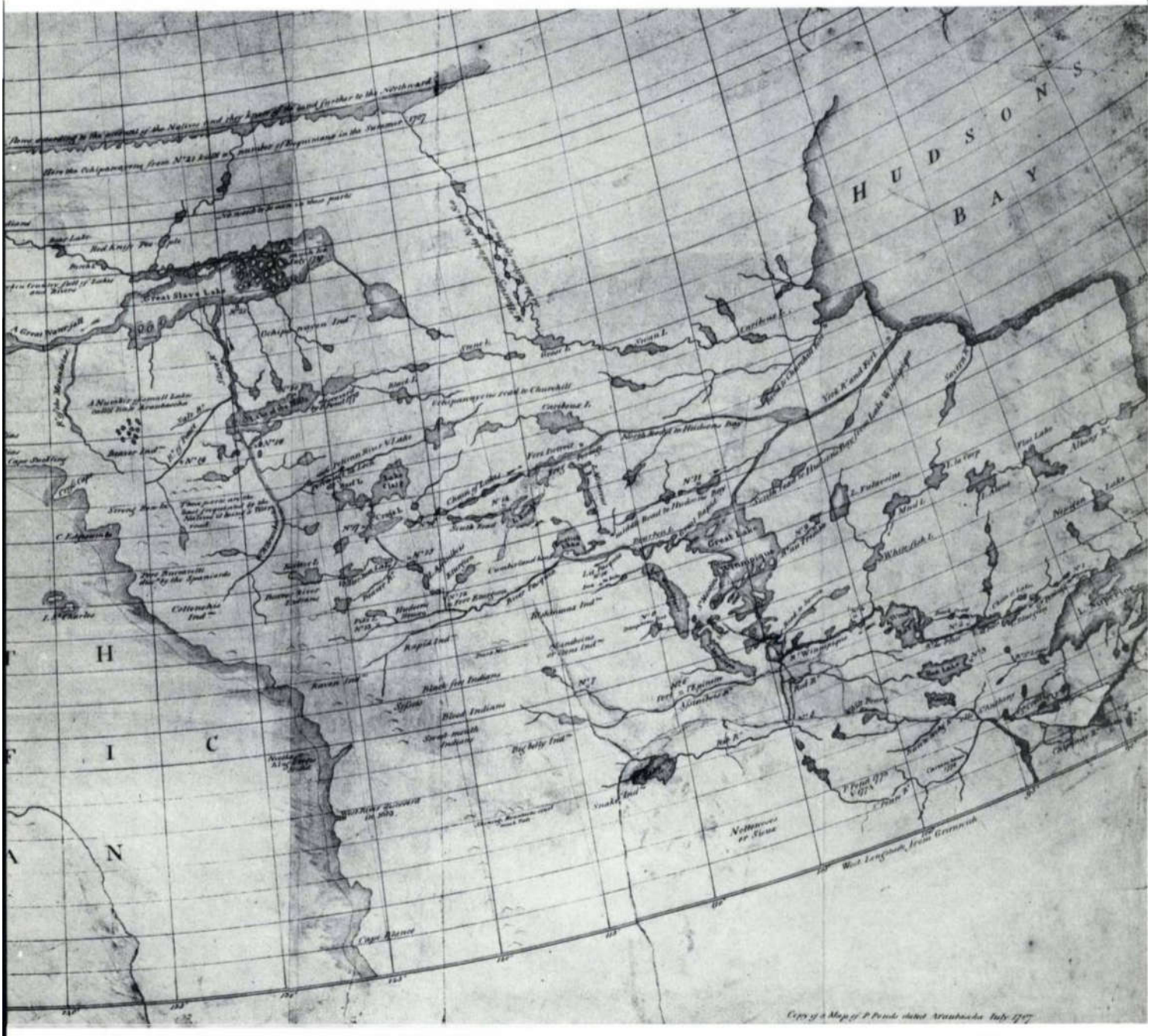
The map prepared by Peter Pond, July 1787, to be carried by Mackenzie down the River and forwarded by Russian fur traders on the North Pacific rim to the Empress of Russia. From the copy in the Public Archives of Canada.

Dr Barratt, Professor of Russian at Carleton University, Ottawa, is author of 'Russia in Pacific Waters, 1715-1825' and 'Russian Shadows on the Northwest Coast of North America, 1810-1890: a study in rejection of defence responsibilities', published in 1981 and 1983 respectively by the University of British Columbia Press.

Alexander Mackenzie and the Empress

By Glynn Barratt

ALEXANDER MACKENZIE HOLDS his place in the Canadian and the British gallery of patriots and heroes — as is his right. How after all (it has been asked rhetorically for many generations) could our modern Canada, inheritor of British North America, have come into her continental legacy, but for Mackenzie's famous journey from the East to the Pacific littoral? Part of the myth that has evolved around Mackenzie's name is that, driven on by patriotic motives as well as, admittedly, by trade considerations and the urge to tap



Sir Alexander Mackenzie.

new fur wealth on the far northwestern rim of North America, he crossed the Height of Land to strengthen Britain's right of sovereignty to the west of it — and to forestall later pretensions on the part of the Americans or Russians, both of whom were in the North Pacific fur trade.

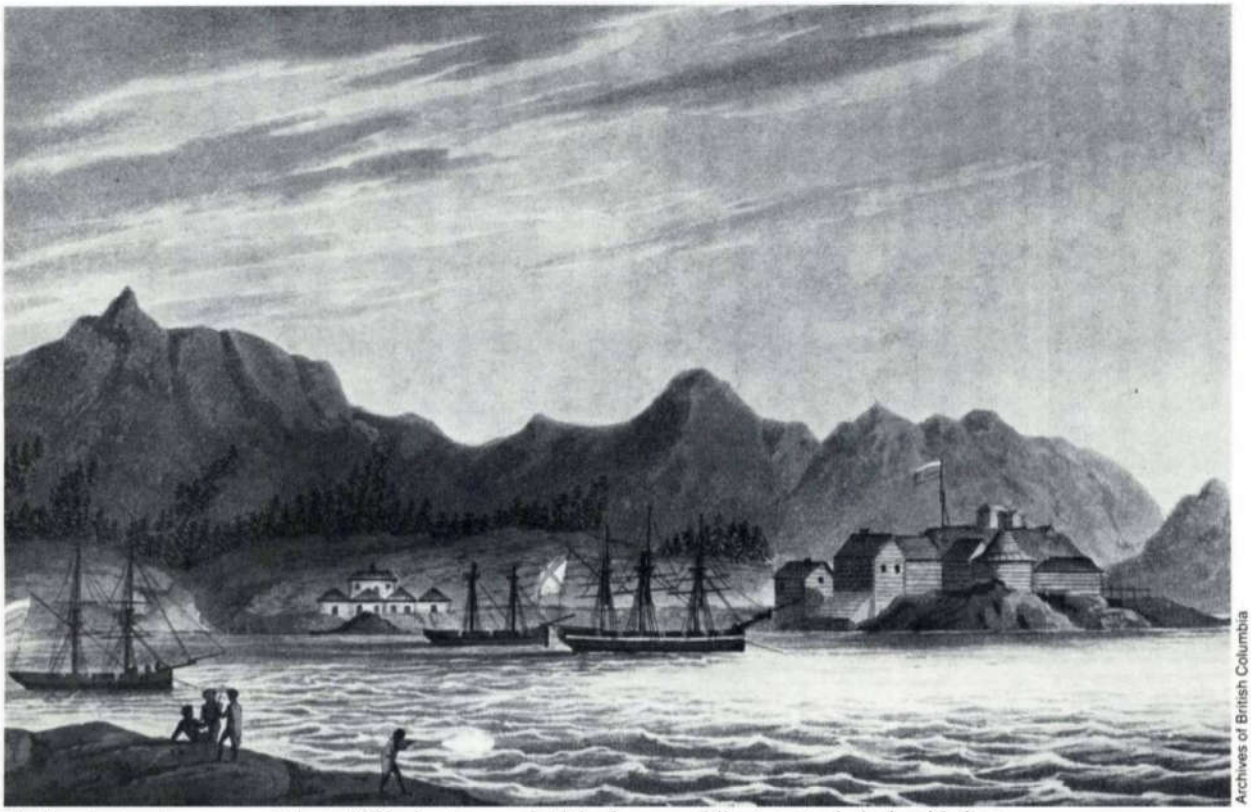
Every nation needs its myths, nor, broadly speaking, can historians do much to undermine them. Canada is no exception. But to read Mackenzie's journals, notes and letters of the period (1788-93) and the contemporary writings of his partners in the North West Company, is soon to see that far from hoping or expecting to forestall the Russian fur hunters and traders on the North Pacific rim, he was expecting to be *met* by them, on his arrival. More than this, he meant to forward both a map, by Peter Pond his fellow trader, and a letter, to St Petersburg, using the Russians on that rim as intermediaries.

Why a map? Because like other prominent Nor'-Westers of the period, Mackenzie saw advantages in stimulating Catherine II's interest in the enormous fur wealth of the continent whose fringes Cossack parties had been visiting — successfully from the commercial point of view, though ruinously for the Aleuts — since the mid 1740s.

In Mackenzie's day, as earlier, it was essentially with otter pelts and with the prospects of substantial profits to be made from them in China, that the Russians and the English-speaking interlopers, Captain Cook's successors on the fur-rich Northwest Coast, concerned themselves. Even for one prime otter skin, as Cook's own people had discovered while revictualling at Canton, the merchants of that place would pay a handsome sum; nor was the 'Coast-to-China' trade (thus incidentally and almost casually started) demanding in resources, men or time. A well-built vessel with a healthy, well-armed crew could spend the necessary month or two along the coast, watching for danger from the warlike Indians, then make a relatively swift and easy passage south to China. As such varied representatives of the new trade as Captains Meares, Dixon, Gray and Portlock found, however, one could hardly follow it without both recognizing and, in some respects, deploring the expanding Russian presence on the continental mainland and the Russians' ever escalating clashes with the Indians, potential fur dealers for all the Europeans. Cook's and his subordinates' association of Cossack hunter-traders with oppression of the native tribes and violence, was strongly reinforced in British minds, at Montreal as elsewhere, by Portlock's graphic *Voyage to the North West Coast* (1789.) Here are a dozen lines from Chapter V of Portlock's narrative, reflecting his experiences of July and August 1786 in 'Cook's River', the modern Kenai Inlet:

> We were great surprised to hear the report of a great gun from the shore. It was now very evident that some nation or other had got to this place before us, which mortified me not a little. . . . I found the people to be Russians. . . . The Russian settlement was situated on a pleasant piece of flat land, about three miles in length and 200 yards over. . .

The Russians were hospitable, and warned the visitors against the local natives who, it seemed, 'had attempted to surprize them' more than once. Both food and information were exchanged. Dixon and Portlock then proceeded slowly up 'Cook's River' in a whaleboat, the better to survey and call on Portlock's wooding party, put ashore two days before. A carpenter, they learned, had found persuasive evidence of Russian presence elsewhere in the area: 'a tree with two holes through it...made by swivel shot...probably fired from a Russian sloop.' Little by little, Portlock and his people understood that they had come into a war zone, where the Indians and Russians had been skirmishing for months, if not for years. The English had not come to take possession of the country, or of any other country, for Great Britain. Like the partners of the North West Company across the continent, they viewed the Northwest of America through skilful traders' eyes and had not, hitherto, given much thought to sovereignty issues. Now, however, they began to see that Russians were encroaching on a region, rich in furs, to which their king had formal claims. Nor was it probable that Britons in that region



Archives of British Columbia

The Russian headquarters at Sitka in 1805 when it was rebuilt by Baranov, following attacks by local Indians.

would, in future, manage to avoid the fruits of war: Indian hatred of the Europeans, constant danger, and a dearth of local groups with whom to trade. Consideration of these facts sobered the English, and convinced them, once and for all, that Russia's presence and continuing activity in North America *should be opposed*, in all ways feasible and politic, by British trading interests. Their narratives, like other recent published information about Russia's southward progress on the fringes of America, considerably strengthened public consciousness in London and in British North America itself of Russia's small but growing threat to British interests in the Pacific and in northwestern America as well. So much is evident from London newspaper reports, from periodical reviews, even from public controversy — as for instance among Captains Dixon, Meares, and their men — and from the Nor'Westers' attempts to draw advantage from the growing Russian stake. Not from the likes of Peter Pond and the Mackenzies of the North West Company, as from the British seaborne traders who had personal experience of Russian enterprise along the coast, were there any attempts to freeze them out. They, to the contrary, saw promise in the Russians' very presence and ambitions in America, at least, until the century drew to its close.

Peter Pond, the semi-literate fur trader and first white man known to have reached the Athabasca country, which he personally brought into the continental fur-trade system, was a self-made man of wide vision and energy. He also formed a link between Mackenzie and the Russian fur traders and the Empress, whom he never saw. Today he is remembered chiefly for his pioneer maps of the remote northwestern parts of North America, amalgams of reality and guesswork based in part on what he saw himself, in part on what he picked up from the Indians.

Pond appears to have visited Slave Lake in 1787, and to have noted ice on it as late as mid-July. If he did not see the mouth of what was later to be known as the Mackenzie River, at its western end, he certainly discovered from the local natives where it lay, and could inform the elder Ogden, among others, of the facts. As a result, Mackenzie could proceed directly to it, (lat. 64°N, long. 135°W), two years later, and Mackenzie's journey to the Arctic Ocean thus rested in part on Pond's own work. Pond and Mackenzie, who had come as his successor in the Athabasca country, spent the winter of 1787-88 together. It was then that Pond had fired the imagination of the younger man with talk of fur wealth and discoveries along the large but nameless river to the north.

Where did that river lead to? In the view of Peter Pond, it flowed in the direction of 'Cook's River' — that is it tended west as well as north and so towards the countries where the Russians, met by Cook, Dixon and Portlock and a dozen other English captains, traded. No one knew how far away 'Cook's River' lay, but it was possibly not very far. Pond had already drawn a map incorporating these ideas. 'Capt. Cook' he wrote across it, 'found the water on this [Northwest — GB] Coast to be much fresher that Salt or Sea water: also a quantity of drift wood no doubt carried thither by the Rivers Araubaska, Peace and Mountain, as they commonly overflow their banks in the months of May and August'. In short, Pond thought it more than likely that the river draining Great Slave Lake flowed west, towards the North Pacific inlet found by Cook, and not due north, towards the Arctic. He imparted these ideas to Mackenzie. At the same time, almost certainly, he ventured his opinion that Catherine II would appreciate a map showing correctly the relationship between 'her' parts of North America and its interior, with major river systems. She might use it to extend the range, effectiveness, and influence of Cossack hunting parties, and would probably reward the draughtsman too.

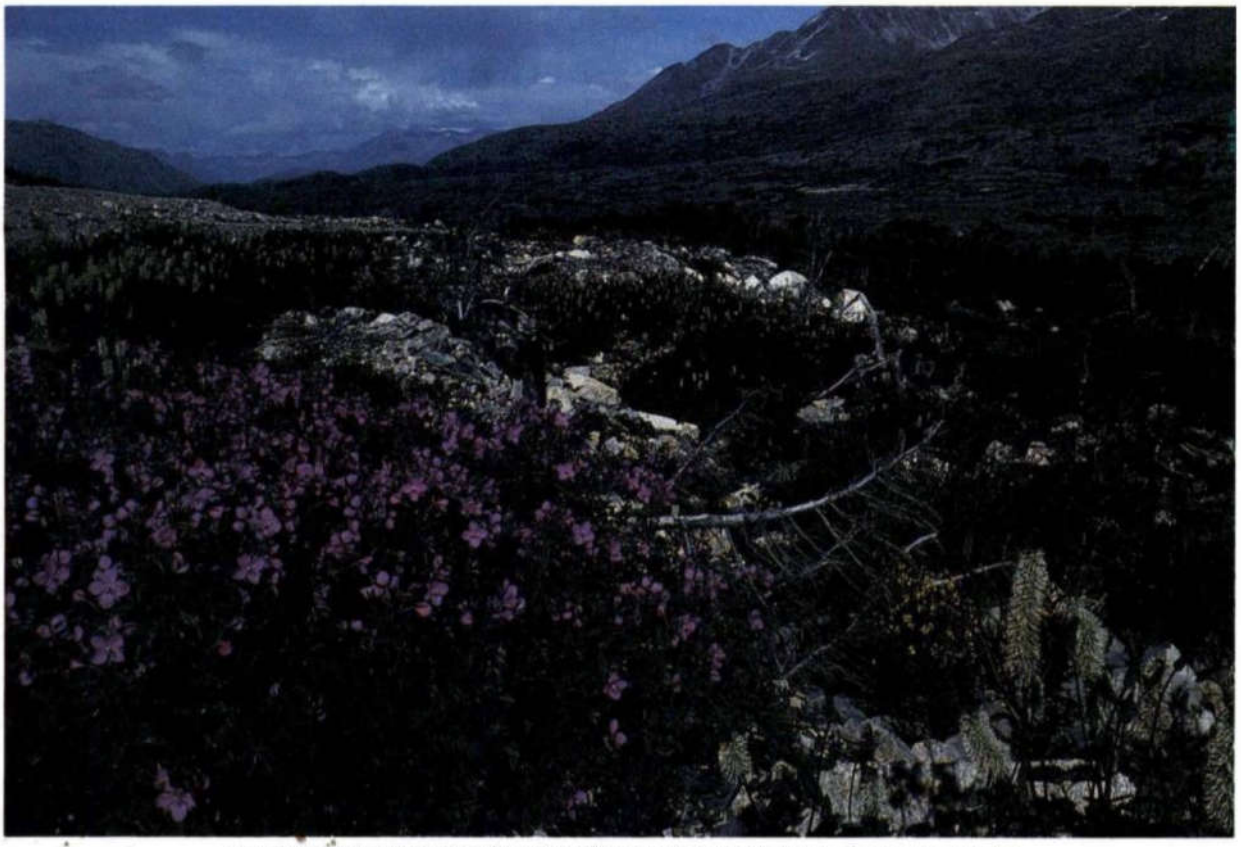
We do not know how these designs and visions were received by Alexander Mackenzie, in the early weeks of 1788. It is conceivable that, even then, he was convinced that they were practicable and that certain grand allusions in his letters of that very month, for instance, to his own subordinate, the loyal Roderick McKenzie, were to journeys of the sort proposed by Pond, to the Pacific. ('I already mentioned to you some of my distant Intentions. I beg you will not reveal them to any person as it might be prejudicial to me...') More probably, he heard out Pond with private scepticism which dissolved, little by little, with the Athabasca snows, as months went by. In formal correspondence to his own chief, Patrick Small, he wrote of Pond's Pacific-Russian plans with some disdain.

Pond, unaffected by the views of other men, worked on a copy of his map of Northwest North America to be presented to an empress who, he trusted, would appreciate its true worth better than Americans or Englishmen. (Earlier drafts had been presented to the U.S. Congress and the British Government, as represented in Quebec by Henry Hamilton, Lieutenant-Governor. Nothing had come of those approaches, to the enterprising trader's disappointment.) Late in February 1788, we know, he was continuing to work up 'wild ideas' and 'incomprehensibly extravagant' designs in which the Russians played a part, and adding touches to his 'fine map' for the unsuspecting Catherine of Russia. Not long after he completed it, and would himself — it seems — have carried it down the Mackenzie River to (as he imagined) the Pacific, Petropavlovsk-in-Kamchatka and St Petersburg, had other duties not distracted him. Under the circumstances, he was afterwards at pains to give associates and friends at Montreal to understand, he told Mackenzie to proceed from Great Slave Lake. So Ogden told his father, in a letter bristling with inconsistencies and errors spread by Pond himself. ('Another man by the name of McKenzie was left by Pond at Slave Lake with orders to go down the River, and from thence to Unalaska, and so to Kamskatsha, and thence to England through Russia, etc.') In fact, Mackenzie, who had ceased to think Pond's plans chimerical, had set out for the Arctic very largely on his own initiative. With Pond in Montreal, he was at liberty to follow up his project, with support from local agents of the North West Company trading in furs southeast of Athabasca Lake.

Mackenzie much disliked Pond's cavalier attitude to latitude and longitude and unreliability as a reporter of specific information. He himself respected accuracy. Even so, to have embarked on such a trip without Pond's map, given the chance to use it, would have been strange. Pond had been conscious of the Russians on the fringe of North America and made Mackenzie conscious of them too.

The Nootka Sound Affair having blown up between Spain and Britain, and the growing Russian presence in that area having accordingly impinged on the awareness of British subjects with an interest or stake in the Pacific fur trade, it would certainly have been surprising had Mackenzie *not* been conscious of that presence. Even so, it is instructive to recall that as he finally moved down to the Pacific slope in May 1793, towards the end of his historic (second) journey overland, Mackenzie was expecting to meet Russians on the coast. The Russian presence on the far northwestern rim of North America was an inevitable legacy for England, Spain's successor as the would-be ruling power in that area, and for the Montreal-based traders who were representing Britain's national interests, *pro tem*. It was not long before Mackenzie's fellow-countrymen on the Pacific slope were as convinced as Portlock, Dixon and their companies had been a decade earlier, that Russia's interest in what was now 'New Caledonia' should be repressed, not fanned as Peter Pond had wished.

As for Mackenzie's own preparedness to recognize and even stimulate that interest, it seemed anachronistic and misguided to his partners by the mid 1790s, long before the echoes of the Nootka Sound Affair had died away. He, in his writings, underplayed both Peter Pond's great contribution to his Arctic and Pacific expeditions and, especially, the matter of the map never delivered to the Russian Court, but used to good advantage by himself when younger, poorer, and unknown. ◆



An enthusiastic splash of colour from alpine flora contributes to the beauty of northern mountains.

Yukon Wild Flowers

By Allen D. Macartney

Mr Macartney, of Ottawa, is a free-lance writer-photographer and amateur naturalist. In the summer of 1983, with his wife Denise, he retraced and photographed the route of the Klondike Gold Rush from Skagway, travelling the 460 miles from Whitehorse to Dawson by canoe.

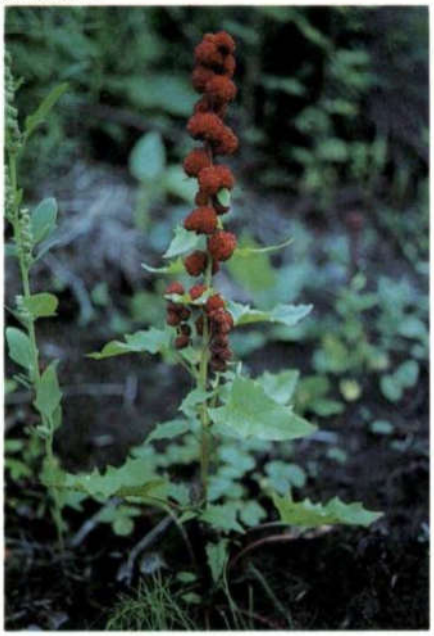
IN 1898, when 30,000 miners raced down the Yukon River to the Klondike 'gold fields', few men paused to admire the rich symphony of colour surrounding them. Had they been less single-minded those gold stampeders would have noticed a remarkably profuse array of flowers, common and unusual, bearing such exotic names as Siberian Orchid, Strawberry Blite, Indian Paintbrush and Arctic Fleabane. Eighty-six years of wearing climate has erased most traces of the old-time gold seekers, but wild flowers still begin their exuberant celebration throughout the Territory each spring.

Unlike low-lying tundra habitat of the Northwest Territories, the Yukon is mostly elevated, consisting of mountains in the southwest, and an east-sloping plateau in the centre and north. Since most Yukon land lies south of the treeline, it supports many varieties of flora commonly found to the south in the provinces. Familiar and adaptive Red Clover, Goldenrod and Pond Lily find the cool, northern environment of the Yukon ideal for growth.

One of the most abundant wild flowers in the Yukon, the Prickly Wild Rose has invaded many old log ruins of the Klondike Gold Rush. Growing up to

Siberian Aster (Aster sibiricus) is the most common aster in the Yukon/Alaska area, and inhabits meadows and gravelly river bars. As the name implies, this variety of Aster is found in parts of Siberia.

Strawberry Blite (Chenopodium capitatum) thrives near the demolished gold-rush town of Coffee Creek, along the Yukon River. Growing up to 32 inches tall, it inhabits river sand and gravel bars.



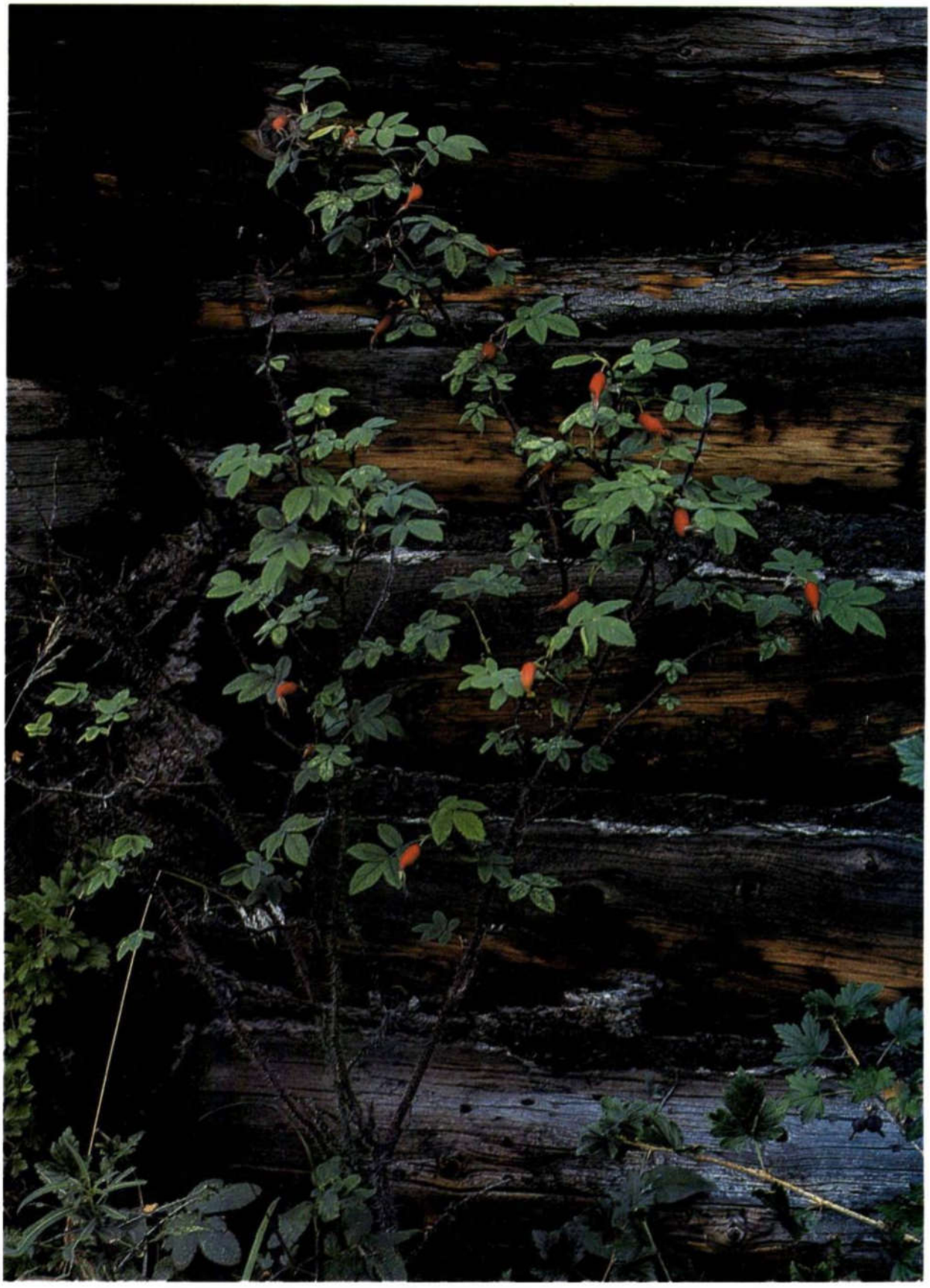
The lush stalks and leaves of the Fragrant Water Lily (Nymphaea odorata) are favourite and nutritious food for beaver and moose. The plant prefers quiet ponds or sloughs away from the current of main rivers.

The Arrowleaf Groundsel (Senecio triangularis) blooms June through September primarily in alpine areas. This plant was found near Carcross, a picturesque town beside Bennett Lake, near the Chilkoot Pass.

Sparkling with morning dew, a Fireweed (Epilobium angustifolium) inhabits the cool, dark forest near Wolf Creek. The floral emblem of the Yukon, Fireweed thrives in gravelly soil along roadsides and in burnt-over areas of woodland.

Delicate and diminutive Twinflower (Linnaea borealis) pokes through the thick, shaded carpet of moss at Wolf Creek, near Miles Canyon. This fragrant bell-shaped flower ranges over most of the northern hemisphere.

Yellow Creeping Spearwort (Ranunculus flammula) grows beside a rusting spike near the wreck of the paddlewheeler 'Casca'. This miniature flower thrives in muddy depressions along the Yukon River.



six feet tall, the rose inhabits bogs, woods and roadsides. From the Yukon River, the small cluster of log cabins at the abandoned North West Mounted Police post of Selwyn is all but indistinguishable behind masses of red rose blossoms.

Before the last snows disappear, the Yukon land bursts forth with colour and fragrance from countless varieties of wild flowers. Many are particularly adapted to cold weather habitat. Yellow Glacier Avens and Arctic Poppies are extremely hardy plants, which thrive in the gravelly, often acidic northern soil. As on many other northern plants, minute, silky hairs grow along their stems, trapping heat rays and reducing moisture loss.

Mauve Pasque flowers often grow through a thin layer of snow. Not only do they have a covering of hair fibres, but also hollow, woody stems which create a greenhouse effect, trapping warmth from the sun, and providing further insulation from snow and wind.

Botanically, Pasque flowers, Purple Saxifrage and other northern environment plants should not be able to exist in sub-freezing temperatures. Photosynthesis demands temperatures above 43°F; yet, these flowers survive because of microclimates within. Internal temperatures may be up to 36°F warmer than outside temperatures, thus permitting growth even when the air temperature a few feet above the ground is below freezing.

Purple (and rare white) Fireweed have their own defences to ensure survival. On each stem, flowers bloom and mature, not simultaneously, but over a period of time, thereby dispersing their more than four hundred seeds to the wind over s veral weeks. Through this method, some seeds are protected from an unexpected frost. Harsh climates can destroy plants relying entirely on seeds for reproduction. Fireweed, Twinflower and others hedge against this threat by spreading not only through seeds, but also through subterranean runners called rhizomes.

Long hours of sunlight during arctic and sub-arctic summers permit photosynthesis to continue almost day and night, interrupted by a short rest period during twilight. For one brief season the northern climate is an ally of the wild flower. This is a storing period for many plants, for within their roots and rhizomes huge reserves of carbohydrates, starches and sugars are accumulated to permit an early start the next spring. Beginning growth as early as possible is necessary for the survival of many species. The most highly successful plants, however, are perennials, whose growth does not depend entirely on reproductive success in the preceding season. Annuals, which must complete a full maturing growth cycle, are quickly eliminated from a region with one or two consecutive, unfavourable summers.

In the most northern reaches of the Yukon, wild flowers must cope with even greater problems than in southern parts of the Territory. Plant roots and rhizomes must grow in close proximity to permafrost, yet without damaging their delicate structure. Phosphate and nitrogen, important for plant growth, are often in short supply. Wild flowers and other arctic plant life acquire necessary nutrients from animal droppings, bones and human garbage. Growing at high altitudes, or in the far North, many flowers take on brilliant, dark hues in order to attract greater heat from the sun. Instead of growing tall, these plants hug the ground to avoid cold, strong winds. Alpine Fireweed, for example, is a short, bushy plant with deeply coloured blossoms.

Early gold miners who came into the wilderness were little inured to the extreme rigours of pioneer life along Yukon creek beds. They quickly learned that wild flowers could provide food as well as beauty. Rose-hips (the fruit of the rose) make very good jam and are an excellent source of Vitamin C. These were used by old-time miners to forestall the dreaded disease of scurvy. Carbohydrate-rich root stalks of Pond Lilies also provided a food supplement, whereas dried heads and seeds of Red Clover were made into nutritious flour. Red Clover heads could be steeped for tea.

Many arctic wild flowers have circumpolar distribution. Difficult growing conditions and long daylight hours at this latitude around the world cause similar plant species to grow in northern North America and Eurasia. Because of natural hybridation, asexual reproduction and the appearance of intermediate plants within species groups, recognition is often frustrating for even the most knowledgeable botanists. For example, there are over 200 species of Cinquefoil worldwide, and at least 25-30 varieties in the Yukon alone. Cream-coloured Yarrow and the petite Twinflower also appear in many varieties.

Life in the North is intense. For a short while flowers exhibit brilliant displays of colour, before inevitable ice and searing cold recapture the land. The momentary summer truce ends. Underneath the snow, however, dormant root stalks, rhizomes and seeds left from summer lie insulated, waiting for warm solar rays to waken them to a new spring. ◆

Used by the early miners to make jam and tea, the Prickly Wild Rose (Rosa acicularis) is one of the most prolific Yukon wild flowers. Here, rose-hips decorate an old log-cabin wall at Selwyn.

'Massacre' of the Inuit

By Shepard Krech III

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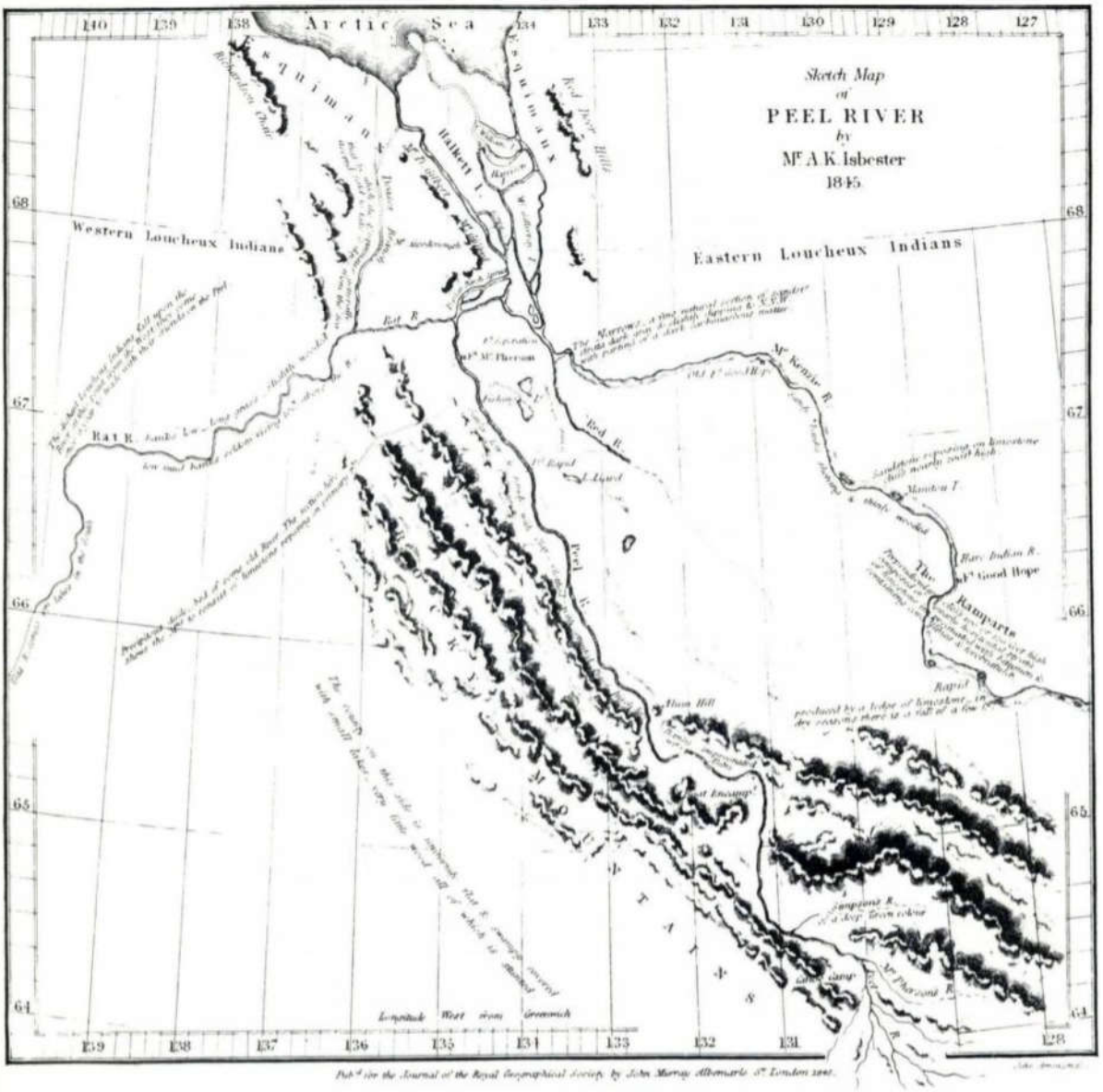
IN JUNE 1850, the calm along the Lower Mackenzie River was fractured by a bloody incident involving Eastern Kutchin (long called Loucheux by this time by French-speaking employees of the Hudson's Bay Company and its predecessors in this region, the North West and XY Companies); Inuit who lived in the Mackenzie Delta region; and Euro-Canadian traders employed by the Hudson's Bay Company. Bloodshed was not uncommon along the lower Mackenzie River, a major meeting ground for the often mutually hostile Inuit and Kutchin, but this year marked the first time here that it involved the Hudson's Bay Company so intimately.

Two versions of what happened that June have been preserved in the depositions 'Evidence of Hebert dit Manual and Neil McKay respecting the Massacre of the Esquimaux June 1850' that Augustus Peers, the clerk in charge of Peel River Post, recorded in November 1850. These depositions tell much of the complex relations between Kutchin, Inuit and Hudson's Bay Company traders during that era. They provide rich detail that one can use to examine the reasons both for Kutchin-Inuit hostilities and for the general skittishness of Company traders insofar as the Inuit were concerned — their great reluctance to consider the Inuit as anything but hostile.

In June 1850, one boat was en route from Fort Good Hope to Peel River Post, two of the northernmost posts in the Hudson's Bay Company's Northern Department. Eight men — of whom five were Company servants and the remaining three, Hare Indians hired for the voyage and summer work at Peel River Post — manned the boat, which probably carried a few goods for the summer trade. (The major outfit for the winter of 1850-51 would not arrive until mid-September.) Two of the Company servants in the boat were Neil McKay and Jean Baptiste Hebert, or Manuel as he was called. McKay was a fisherman, born in Scotland, who earned £25 per year. Manuel was a steersman, country-born in Trois Rivières, Quebec; in 1850 he was thirty-seven years old, had been with the Company for twenty-one years, and was earning £24 per year. Both had been at Peel River Post for several years, and each had given some thought to retiring from the Company. Peel River had a reputation as a hardship post, and at one point, Manuel thought he might not renew his contract because voyaging in the mountains was too strenuous. At the post, Manuel performed a variety of tasks connected with the boats (and as a steersman, was present on the annual voyages to and from Fort Simpson, District headquarters, that transported furs and trade goods). He also hauled meat, fish and trade goods for Fort Youcon to La Pierre's House, the way-station outpost west of Peel River Post. McKay was occupied mainly in the important summer and fall fishery at Peel River Post. He also hauled meat, and in December of 1849 took the winter express — the packet of letters — from Peel River Post to Fort Good Hope, where he remained until June. In April 1850, Manuel left for Fort Good Hope to discuss there the renewal of his contract with the head of the district, who came down to that post to collect the fur returns from posts along the Mackenzie River and assess information received from posts farther northwest.

Near Arctic Red River (then called Red River by the traders), the Hudson's Bay Company party saw camped a small band of Mackenzie Flats Kutchin led by a trading chief named Ghendoug, which was on its way to trade at Peel River Post. They put ashore and, because they were out of meat, traded for provisions. They left the camp at 8 a.m., after a two-hour rest. The party continued to Point Separation, where its members hunted geese and considered stopping for breakfast but, on McKay's advice, decided to go to 'Dr Richardson's "Cache" ', a bit below this spot.

McKay and Manuel arrived at the cache and went ashore. Just then, three Inuit appeared in 'canoes' (kayaks) 40 to 50 yards away, coming among ice floes 'bawling & crying out' and 'whooping & yelling & dipping their bows in the water and placing their arrows before them'. There was some initial confusion. According to Manuel, McKay said 'hear are our people', but Manuel thought the Inuit were Loucheux; it was probably Maccaconce, one of the Fort Good Hope Indians, who correctly identified them as Inuit.



On this sketch map by A.K. Isbister, 1845, the Peel River Post is shown as Fort McPherson. The massacre took place on the Mackenzie River below the mouth of Arctic Red River (shown as Red R.). From the 'Journal of the Royal Geographical Society of London', Volume 15, 1845.

A camp of Mackenzie Delta Eskimos. From a drawing by Emile Petitot, published in his book 'Les Grands Esquimaux', 1887.

'Danse des Esquimaux Tchiglit au Fort MacPherson' after a water-colour by Emile Petitot.

McKay said that Manuel grabbed his gun in order to shoot at the Inuit but that he stopped him. In contrast, Manuel reported that 'I merely held up my Gun to show the Esquimaux we were armed' and that he suggested continuing the voyage. Three more Inuit arrived, and according to McKay, Manuel joined by Maccaconce were readying to fire but he prevented them from doing so.

By this time the entire Hudson's Bay Company party was ashore. One of the Fort Good Hope Indians wanted to go along the shore to see if any more Inuit were hiding in willow bushes. McKay quickly ran upstream (after Manuel asked him not to go) to see whether Ghendoug's band was coming down. One mile up, he discovered the band, numbering sixteen Kutchin, in canoes. They came ashore, and at least twelve Kutchin accompanied McKay to the site where Manuel and the Inuit faced each other.

The Kutchin walked to the bank and began the difficult task of communicating with the Inuit in mutually unintelligible languages. The Kutchin made the Inuit understand that they wanted them to come ashore to trade; the Inuit made signs that they would not come until the latter 'put down their guns out of the way'.

The Kutchin put their guns on the bank and went down to the edge of the water, below cakes of ice left from the fall of water following the running of ice during the spring break-up. The Inuit approached the river edge, and they began trading. According to McKay, the Inuit traded their bows and arrows, knives, coats and shoes. Near the end of the exchange, Ghendoug said (according to Manuel) that a large party of Inuit was coming on the other side of the river to ambush them. McKay reported that some Kutchin took their guns and hid among the ice floes on the bank, unknown to the Inuit who were still below the ice in their kayaks. McKay once more took their guns from them.

Manuel, according to his deposition, told Ghendoug to end the exchange, but Ghendoug was insistent on wanting to trade for a kettle, which was coming with the wives of the Inuit, who had been sent for; and so Ghendoug asked the Inuit to come ashore and dance. McKay saw darker motives: the Kutchin asked the Inuit to come ashore, McKay thought, because he had taken their guns away and they had been unable to accomplish what they designed.

The Inuit leader came ashore, naked from the waist up, gave a sign that he was not armed, and was joined by five others who did as he had. The Kutchin and Inuit faced each other, fifteen yards apart, and danced, first the Inuit then the Kutchin. At this time and during what followed, the Kutchin and Inuit were separated by a small river that cut the bank and shore. Some Kutchin again took their guns and crept off into the willow trees to ambush the Inuit but McKay disarmed them

A Kutchin dance. Sketch from 'Journal of the Yukon 1847-48' by Alexander Hunter Murray who established Fort Yukon for the Hudson's Bay Company.

once more and returned their guns to the bank, where the other firearms were — only to find these others cocked and ready to fire.

Earlier, McKay had slipped off an ice cake into the water and so went to dry out at his fire 'about Two gun shots off'. Before he left, he uncocked the guns, told Ghendoug to bring the Inuit to Peel River Post to trade, and told Manuel to try to stop the Kutchin from ambushing the Inuit. Manuel replied, according to McKay, 'It's not my business' and said he would not stop them.

McKay went off to the fire. Manuel, according to his deposition, told Ghendoug to send away the Inuit but Ghendoug replied 'Stop, stop, I will fire at them!' Manuel said, 'Do as you wish', and Ghendoug hid a gun inside a bear skin and approached an Inuit and danced. Two Kutchin, meanwhile, hid themselves in the willow bushes and from there shot and killed four Inuit. Manuel reported: 'I did not fire at those on shore but there were Two in Canoes a long gun shot off whom I fired at without effect.' McKay heard first one, then several shots, and came back to find four Inuit dead or nearly so and two escaping in their kayaks, one of whom was wounded.

Following the killings, the Kutchin crossed the small river to where the Inuit were lying. They cut up the skins of the Inuit kayaks to divide among themselves. Then a Kutchin 'cut the Esquimaux with his knife under the arms'. Manuel and McKay got in their boat with the rest of their men, and the Kutchin got in theirs, 'sang a death song', and asked Manuel for some ammunition which he gave. And they all continued the journey to Peel River Post.

When they arrived, Peers, the clerk at the post, questioned McKay and Manuel on their roles in the massacre and he also asked Ghendoug why he killed the Inuit and whether the Hudson's Bay Company men had anything to do with it. To the first question, Ghendoug replied, 'One of our party having died during the winter by reason of the "bad medicine" of the Esquimaux we killed them to revenge his death'; in response to the second, he said 'McKay endeavored to stop us from firing, but Manuel did not.'

This ends the account of the June 1850 massacre. To understand whether the reason provided by Ghendoug makes sense, we need to embed as firmly as possible the massacre in the context of the trade, of interethnic relations, and of beliefs held by Kutchin, Inuit and Hudson's Bay Company traders about each other. It would also be of interest to learn what happened to some of the principals, especially Manuel, for to discover this is to discover the reaction of the Company to the massacre.

The Eastern Kutchin and Mackenzie Inuit had been trading with each other since before the time that Alexander Mackenzie voyaged down his 'River Dis-

appointment' in 1789, when he discovered Eastern Kutchin with Russian-made objects obtained from Mackenzie Inuit. They had also been fighting with each other for at least as long. Both Inuit and Kutchin traditions, and the derogatory terms they used for each other, provide support for a lengthy relationship of mutual antagonism. Neither group (the Kutchin unlike their Athapaskan neighbors, the Hare) had a reputation for meekness. The Kutchin struck early traders as bold, haranguing 'Quarrellers' and the Mackenzie Inuit were feared by traders and Kutchin alike.

In the sixty-year period from Mackenzie's voyage in 1789 until the massacre in 1850, the Kutchin and Inuit fought each other in the lower Mackenzie and Peel River drainages at least twelve times. When they did not fight, they traded with each other. Occasionally, they hunted together for a week or more. In trade, the Kutchin were interested in whale bone for their nasal septa ornaments, seal oil, and sealskins. As their trade developed in the first half of the nineteenth century, the Kutchin traded for silver foxes and cross foxes that the Inuit trapped. The Inuit desired mainly wolverine skins (which the Kutchin gave them in exchange for the foxes) and European trade goods acquired by the Kutchin at Fort Good Hope and Peel River Post. Most often, trade (and fighting) took place in summer, near the mouth of the Peel River or near Arctic Red River, a more-or-less neutral ground separating these ethnic groups.

The Kutchin, then, were middlemen between the Inuit and the Hudson's Bay Company. They controlled their position with guns (which they and the Company would not allow the Inuit to possess), and as is typical of many middlemen, exacted as high a profit as they could get away with. Understandably this generated tension which, together with traditional reasons for enmity, exploded from time to time.

The explosions were precipitated by spontaneous trading misunderstandings, or they resulted from deliberate raids planned for the summer time — excursions to revenge a previous feud or to acquire trophy or prestige goods. Sometimes, sorcery was the reason for warfare: both Kutchin and Inuit ascribed deaths to the activities of sorcerers (among other causes) and there was ample opportunity for this to occur because diseases swept down the Mackenzie River several times during the first half of the nineteenth century to kill many Kutchin. And so the reason provided by Ghendoug made sense, but even if sorcery had not been invoked, revenge for a prior killing or for some other wrong might have been.

Manuel's participation in the massacre was not condoned, although he probably was warned that the Inuit were aggressive, dangerous, and liable to attack any Company voyaging expedition. For one thing, a number of exploratory expeditions to the Mackenzie Delta — including John Franklin's 1825 trip and P.W. Dease and Thomas Simpson's 1837 voyage — had been harassed by Inuit. For another, as a rule the various chief factors in charge of the Mackenzie River District doubted that a meeting with the Inuit could end peacefully. In the early 1830s, Edward Smith wrote to Governor George Simpson that 'a meeting with the Isquimeaux is to be apprehended — with them every stranger is more or less exposed — their sanguinary manners too well known... & their treacherous dagger is never sheathed, when they see not a force to awe them to peace'. One decade later John Lee Lewes wrote to John Bell, the clerk in charge of newly established Peel River Post, that if Inuit came to the post, they 'should be treated with the greatest suspicion *till proved* to be friends, and even then the eye of caution should never be turned from them.' With regard to trips to and from Peel River Post, Lewes cautioned to guard against attack at night or while resting on shore: 'The people employed in the voyage should be armed as far as your means will admit of so doing every ready to repell an attack against their lives & property but,' Lewes continued, 'never wantonly or for slight cases enter into quarrels with them and be the aggressors.' While Bell wrote Lewes that he was 'convinced of the Truth of your remarks with regard to the Esquimaux', he was not unambiguously so, for he wrote also that he did 'not apprehend any danger from their presence, especially when they are accompanied by our friendly Indians of McK River'. Nor was Chief Factor Murdoch McPherson, who preceded Lewes in charge of the Mackenzie River District, convinced of the danger: McPherson wrote in 1830 that 'the danger which has hitherto been attached to the idea of a collision with that hostile tribe is in my opinion wholly groundless and can at all events be easily obviated by skilful arrangements'. But these were the exceptions. Augustus Peers, of whose opinions Manuel was surely most aware, remarked of the Inuit, 'if I find them inclined to be civil, well and good, but if on contrary they should be inclined to mischief, I shall think it proper and fit to fire upon them'.

One of the reasons for the 'utmost precautions' taken by the traders on their annual voyages along the lower Mackenzie River was that these annual trips were said to have been 'bothered' by the Inuit, although it is unclear in what specific ways. Another reason stemmed from an event that refused to fade in memory. As Chief Factor James Anderson said, '...we have good reasons to use these precautions, many years back an officer and his canoes crew were massacred by these people'. Anderson was remembering here an event that took place in the final year of the eighteenth century. Furthermore, it is not entirely clear that Inuit were responsible for the death of the

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Peel River Post c. 1890. Post manager Joseph Hodgson and his wife stand in front of the seated group of Kutchin Indians. The Catholic priests are probably Fathers Grouard and Lefebvre.

'officer', who was Duncan Livingston, a trader for the North West Company. In one version, Livingston and one-half dozen men descended the Mackenzie River. Below Arctic Red River, they met one Inuit who shot an arrow into their canoe. They then encountered five other Inuit to whom they presented bead strings and other goods, but the Inuit tied the strings of beads to a pole and shot arrows into them. Livingston went to his canoe to leave but discovered that the paddles had been stolen, and it was then that the Inuit shot their arrows and killed the men — all but several Indians accompanying Livingston, who at the first sign of hostility crept into the woods and slipped away. In another version, it was not Inuit but Slavey who were said to have been responsible for Livingston's death. Although this second version was contemporary and deserves scrutiny, it was the first one that fits most neatly the continued aggressiveness of the Inuit and hence was more widely accepted.

Even though the traders of the Hudson's Bay Company may have understood least about the Inuit among all the natives with whom they traded along the Mackenzie River, and although they considered the Inuit least tractable and most actively dangerous, their reaction to Manuel's participation in the killing probably was as immediate and definite as one might expect it to have been, in a region where communications with the head of the Department took so long and where the natives concerned were the least involved in the trade and the most removed culturally from the Hudson's Bay Company.

The Company's reaction was consistent with an incident fifteen years earlier, in which a servant was very directly involved in killing some Indians near Great Bear Lake, and this servant was sent to Canada for trial, tried for murder and found guilty, and condemned to death but actually sent for life to New South Wales. Their reaction in 1850 may have been prompted by the fact that Manuel was not at all reticent to speak of his participation in the affair; far from being contrite, he made 'a boast of having fired three shots at the Esquimaux'.

In the winter of 1850-51, John Bell, who was in temporary charge of the Mackenzie River District — the same Bell who established Peel River Post in 1840 and who was a veteran of numerous lower Mackenzie River voyages — wrote to both Eden Colvile and Governor George Simpson. To the former, Bell spoke of his regret over the 'cowardly and bloody massacre' and said that 'the worst feature of the case is that one of the Company's steersmen named...Manuel is unfortunately implicated in the affair. He acknowledges having fired upon them, and although it be doubtful whether he killed any, he at all events aided and abetted the atrocious deed.' In a letter some two months later to George Simpson, Bell wrote that he had examined the depositions of Manuel and McKay and that 'it gives me sincere pleasure to find...that, they are not so culpable as represented by Captain Pullen, as being the leading perpetrators in this atrocious murder.'

Pullen was in charge of the Western Arctic Searching Expedition, and he and his crew scoured the Arctic Coast west of the Mackenzie River in a search for the remains of Sir John Franklin during these years at mid-century. It is possible that Pullen may have brought some pressure to bear on the Company to take a definite stand on Manuel's participation in the massacre. After all, one member of Pullen's party was

W.H. Hooper, a young man who — as Chief Factor James Anderson reported — 'has been "taking notes" which he intends to print — being rather shallow minded — the Gentlemen amused themselves by cramming him with all kinds of ridiculous stories, but he has picked up some "[own?] true tales" which will not tell well.' Hooper's reflections were published in London in 1853 as *Ten Months Among the Tents of the Tuski*. In this book he spoke of the 1850 killings by the Kutchin 'aided — I blush to say — by one bearing a white skin.' Hooper's account bears a close resemblance to the depositions — he seems to have talked with McKay, Manuel, and others about it — except that he reports that the Indians said they were 'pushed on by Manuel' and he ends with the statement, 'Alas, shame and degradation that a white man could be found worse fiend then the untutored savage!'

No matter, then, that Bell thought that Manuel and McKay were 'not so culpable'. John Rae, who managed the District following Bell for a brief time, proposed to the latter in April 1851 that Manuel be removed from Peel River Post and thought it 'most likely' that Manuel would be sent to Canada 'where he will be at hand, should any investigation into that unfortunate affair, be thought requisite'.

In the meantime, Eden Colvile and George Simpson both reacted to the news of the massacre. Simpson contacted John Rose, a legal advisor for the Company living in Montreal, who informed Simpson that the Court of Canada had legal jurisdiction in the affair although whether it 'will or will not amount to *murder* is of course a question wholly dependent on the facts as they may be disclosed'. Simpson wrote in May 1851 that 'as far as I am able to judge from the facts that have reached me, it is highly necessary to make an example of Hebert' and he thought that Governor Colvile and the Council of the Northern Department would think the same. Colvile also wrote in the spring of 1851 that Manuel was 'deserving of severe reprobation' and he asked Chief Factor James Anderson to collect 'full particulars' on the incident and to send Manuel and McKay to Norway House in the summer of 1852 to wait there for instructions from the Governor and Council of the Northern Department.

Colvile had Anderson proceed with the plan to send Manuel out of the district, in spite of the fact that, after July 1851, he doubted that guilt could be proved against Manuel. That summer, he saw the depositions and thought from them 'that there is not sufficient evidence to sustain an indictment for murder against Herbert — The conduct of McKay appears to have been very good, but he did not see Manuel fire a shot —'.

Besides Manuel and McKay, three other Company servants had been on the trip from Fort Good Hope to Peel River Post and present at the site where the killings took place. Anderson decided, because two of these were new men and did not understand the Kutchin language, in the spring of 1852 to send the third, Thomas Leask, to Norway House with Manuel and McKay. Leask, however, 'expressed a strong desire to remain in the service' and because he also was needed as a fisherman at Fort Youcon, Anderson ordered William Brown, one of the new men, to go in his place. By summer, Anderson had had an opportunity to examine the evidence, and he wrote in July to George Simpson, 'from what I learn nothing can be done to the men — as neither of the witnesses saw him fire on the Esquimaux — this rests on his own assertion — and he has only to maintain silence to ensure his acquittal.' By this time, Colvile thought that 'from want of evidence, it would be a useless expense to send Hebert to Canada for trial.'

In the end, it is not entirely clear what happened to Manuel. He does not seem to have worked again in the Mackenzie River District. He may have left the employ of the Hudson's Bay Company. Perhaps he returned to Trois Rivières, Quebec. Hooper thought that he 'was sent down to Canada to take his trial for murder.' Manuel was no longer mentioned in District correspondence, perhaps because the event and his role in it paled in time, but more likely because the extreme aggression of the Chilkats, who sacked Fort Selkirk in 1852, occupied the attention of the district correspondents and because relations between Kutchin, Inuit and the Company at Peel River Post improved in the next few years. In 1850, Bell had feared that there was 'no hope' after the massacre of 'opening a friendly intercourse with the Esquimaux...and that the affair will lead to disastrous consequences, as the relatives of the killed may likely attempt to revenge their deaths by attacking the Peels River Boat, when bringing out the returns.' But this did not happen, and Augustus Peers did all he could to establish a truce between Kutchin and Inuit and to convince the Inuit that Manuel's involvement was not condoned by the Company. One problem, however, was that one year before the killings, the Inuit were said to 'allege that we [the Company] furnish the Locheux with firearms & ammunition on poupose to kill them'.

In the fall of 1851, Peers sent one Eastern Kutchin named Koonetchaw with a few presents to find the Inuit to try to convince them that the Company (and the Kutchin) preferred peace to bloodshed. Koonetchaw discovered a group of seven Inuit and returned to Peel River Post to get Peers but by the time they came back the Inuit had fled, fearing that the Kutchin would return to attack them. In 1851 and 1852, three groups of Inuit came to Peel River Post and its outpost, La Pierre's House, with a few furs. Peers also met some Inuit near the mouth of the Peel. But in 1853, a group

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Inuit dancing at Fort McPherson, 1892. Photograph from the estate of Chief Trader James McDougall.

of Inuit pillaged a Kutchin of goods he had just received at the post, and Chief Factor James Anderson told the clerk to pay the Kutchin for what he lost (to prevent a feud) and to try to get the Inuit leader — if he should visit — to 'make the guilty parties pay you for these goods'. In 1854, calm reigned, Inuit and Kutchin camped together in the fall at the mouth of the Peel River, and the Inuit traded foxes, martens and seal oil at the post. But two years later, two 'strange' Inuit killed three Kutchin, and the feud threatened to boil over once more.

But there were no further fatalities — even though the 'bitter enmity' between Kutchin and Inuit, the 'greatest obstacle' to opening a trade with Inuit insofar as the Company was concerned, did not entirely disappear. There were several reasons for the ebbing of hostilities. First, muskrats had become increasingly important in the annual productive cycle of the Kutchin for both the pelts and meat these animals provided, but their optimum habitat was the dangerous upper Mackenzie Delta, the no-man's land separating Kutchin from Inuit. To exploit muskrats meant to court danger. Secondly, by the mid-1850s, many Eastern Kutchin had died from epidemic diseases. These diseases, most of which came into the District with the outfits of trading goods, battered the Kutchin in the mid-1820s, somewhat less so in the early 1840s, and again in the early 1850s when Peers commented, 'It is astonishing how rapidly the Indians are dying off.'

So, fewer Kutchin remained to carry on feuds with Inuit, to trade with Inuit at a rate unfavourable to the latter, or to exploit the dangerous buffer zone for animals important for subsistence and exchange. In one sense, they held the balance of power: they were armed with guns. But at this point, it made good sense to give up feuding.

A third thing happened: the Company, for the first time, perhaps, was actively interested in establishing trade relations with the Inuit and took steps to see that this happened. The most important of these steps was interpreting. In 1844, John McLean had complained that 'a friendly intercourse [with Inuit]...cannot be accomplished for want of an Interpreter', In 1852, Peers was actively involved in establishing peace and relations with the Inuit but 'owing to the inefficiency of his Loucheux Interpreter, he could not come to a proper understanding with them.' James Anderson asked Sir George Simpson to send an interpreter from Churchill or Fort George. But no one was available, and Anderson foresaw continued 'trouble, danger and inconvenience...from want of a proper understanding' with the Inuit. Translation was crucial, and it finally became possible in 1856 and 1857, when a Kutchin interpreter assisted in the trade. It is not known how he achieved whatever degree of bilingual abilities he may have possessed, although some Eastern Kutchin living along the Mackenzie River were able to communicate some trading matters with Inuit.

The late 1850s marked the end of an era in the relations between Kutchin, Inuit and the Hudson's Bay Company. No longer would Inuit trade with the Company solely through Kutchin middlemen, who paid the Inuit only from one-fourth to one-half of what they would have received from the Company for their furs; no longer did the distrust of Kutchin and Inuit for each other explode in fatal encounters — although it did not disappear all of a sudden; and no longer were the traders so hampered by their extreme distrust and lack of understanding of the Inuit that they could not capture the trade of the Inuit and bring them within the orbit of the Company. ◆

PARTNERS IN FURS
A History of the Fur Trade in Eastern James Bay 1600-1870

By Daniel Francis and Toby Morantz. McGill-Queen's University Press, Kingston and Montreal, 1983. 203 pp., illus. $25.00 cloth; $9.95 paper.

Reviewed by Charles A. Bishop

This is a historical and ethnohistorical study of the native peoples and the fur trade of the eastern James Bay region between 1600 and 1870 by a freelance historical researcher (Francis) and an anthropologist at the Centre for Northern Studies and Research, McGill University (Morantz). The book is divided into thirteen relatively short and chronologically organized chapters, plus an appendix giving the eastern James Bay Indian populations in 1838 and 1858. The primary source of data is the rich Hudson's Bay Company Archives. The Archives des Colonies pertaining to New France were also consulted.

The theme is encapsulated in the title which is most appropriate since 'Partners' stresses the symbiotic relationship between Indians (Cree) and fur traders. Although not an equal partnership, abundant evidence is provided to show that Indians helped to shape the fur trade and so 'were not the defenceless, passive producers they have often been characterized as being'. A corollary is that because Indians were able to retain their sociopolitical freedom despite having to adapt to continuously altering fur-trade conditions and even after becoming dependent upon certain European materials, there has been continuity in Indian culture. Although altered by the various fur trades, there were no radical disruptions. Thus, the 'present, as represented by ethnographers, and the past, as reconstructed from the historical records' are strikingly similar.

While the Indians of eastern James Bay are now called Cree, this designation was introduced only in 1853 by missionaries, presumably because of linguistic similarities to Algonquian-speaking Cree on the west side of James and Hudson bays. Probably the first Europeans to encounter these peoples were members of Henry Hudson's crew who wintered near the mouth of the Rupert River in 1611. The Cree, nevertheless, had well established trade routes to the St Lawrence that were later disrupted by Iroquois war parties. Discontinuous trade with Europeans ended with the arrival of the *Nonsuch* and the subsequent formation of the Hudson's Bay Company in 1670. Thereafter for nearly a century, the Cree who came to trade at Eastmain House experienced the advantages and disadvantages of the French-English trade rivalry.

Brief, though good, accounts of Indian subsistence practices, social organization and land tenure forms — topics rarely discussed in conventional histories — provide balance and breadth. For example, there developed at this time a specialized and formalized trading-captain system that was neither an indigenous institution nor a European transplant.

A chapter on the daily life at Eastmain House reveals why formal policies designed to keep Indians at arm's length were never completely successful. Indian employment in such activities as goose hunting and fishing for an all-male trader population produced interdependence and miscegenation.

Company interests and activities are also illustrated through a discussion of the mid-eighteenth century Richmond Gulf venture which failed largely because of Indian-Inuit animosity.

Beginning in the 1760s, 'pedlars' from Quebec who eventually formed the North West Company penetrated the northern interior, posing an even greater threat to the Hudson's Bay Company. They even settled outposts along James Bay during the early 1800s. Forced to respond, the H B C established a series of inland posts and northern coastal posts in the late eighteenth and early nineteenth centuries. Despite cheaper prices and easier access to posts for Indians, competition altered the seasonal round and intensified dependence upon Europeans. Many Indians during this period became guides, voyageurs and canoe-makers during the summer instead of subsistence hunters. When competition officially ended, however, with the union of the two companies in 1821 (it continued with rival traders in the region southeast of Eastmain) the H B C was relatively free to introduce policies to improve the trade. Among these were the abolition of the trading-captain system and the trade in summer beaver. After Fort George was established north of Eastmain in 1837, the latter post was abandoned. Many Eastmain Indians came to trade at Rupert House, and along with a growing number of mixed-bloods, provided a valuable summer labour force. Further north, we learn, a successful trade in foxes and seal and whale oil was begun with the Inuit. Because so little is known about the early trade with the Inuit, the chapter on this topic is indeed welcome. The arrival of missionaries and their activities is also outlined (one interesting topic that merits more research is the missionary-introduced syllabic script that spread among Northern Algonquians). The study ends in 1870 at a time when events further south were on the verge of altering the somewhat isolated pattern of life. Thus, the more complicated later history remains to be written.

Scholars interested in Indians and the fur trade will learn much from this work. It complements a growing number of somewhat simliar studies for other areas and simultaneously corrects simplistic overgeneralizations based upon incomplete evidence. Carefully researched and well documented, it provides an entertaining and sufficiently detailed history both for those interested in Canada's past and for contemporary people of eastern James Bay. The theoretical discussion of the conduct of the fur trade and its impact on Indians adds to and reinforces conclusions reached by others. Anthropologists should also consult Morantz's more ethnologically focused monograph on eastern James Bay Cree social organization in the National Museum of Man Mercury Series. Fifteen illustrations (most of which are nineteenth-century photographs) and eight maps greatly enhance the book.

Charles A. Bishop is professor of anthropology at the State University of New York at Oswego, and author of 'The Northern Ojibway and the Fur Trade'.

NORVAL MORRISSEAU AND THE EMERGENCE OF THE IMAGE MAKERS

By Elizabeth McLuhan and Tom Hill. Published for the Art Gallery of Ontario by Methuen, Toronto, 1984. 118 pp., illus. $18.95 paper.

Reviewed by Gary Scherbain

'Norval Morrisseau stands alone in his formal innovation and largeness of personal vision. He was the first Indian to study seriously and to update his own cultural beliefs and translate them visually for contemporary Indian and non-Indian audiences. In doing so he became the first Indian to break through the Canadian professional white-art barrier. His brilliance lies in his ability to break away from his own conventions, to constantly renew his vision.'

Morrisseau is rightly considered the Father of Canadian Native Art, and Elizabeth McLuhan and Tom Hill have done a great service with their recent publication *Morrisseau and the Emergence of the Image Makers*. This colourful and descriptive book goes a long way to place in the perspective of the Canadian mosaic the value and tradition of the art form from our original people which has emerged in the last 25 years.

From Tom Hill's chronicalling of the varied and primitive roots of the Indian craft to the business of selling Indian art, through Miss McLuhan's attempts to grapple with the images and personal history of Morrisseau and six other major Indian artists, the reader is propelled through an accomplished anthology of an art form, at once indigenous and at the same time foreign.

And yet there are gaps in the encounters with these seven artists. There are issues glossed over and small historical inaccuracies. Nowhere is there a real attempt to do anything but glorify the art form. Missing is an explanation of why these seven artists were chosen.

The book, on its back cover, is cited as 'the first full-length examination of contemporary Woodland Indian art in its cultural and political context'. But why these seven? In a sense there can be little quarrel with the chosen artists. Each of them has captured in their own way their lives and their society from a personal native perspective, whether it be the innovating Morrisseau or the Saul Williams who started in the Morrisseau tradition and has achieved his own immediately recognizable style. The authors, however, do nowhere state why they have chosen to eliminate the free-flowing birds of Benjamin Chee Chee or the evolution of Robert Kakegamic. They have left out the ghostliness of Norman Knott and failed to mention the striking creativity of Leland Bell. Why Josh

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Kakegamic and not his brother Goyce except to mention the Triple-K printing company? What of Don Ningewance and his landscapes or of Sam Ash and his world of silence?

In terms of the seven chosen, why have the authors stopped at the Ontario-Manitoba border? Jackson Beardy, Eddy Cobiness, Maxine Noel, Clemence Wescoupe are but a few examples of artists from Manitoba grouped in the Woodland school. In the case of this last set of artists, one can assume because the publication is for the Art Gallery of Ontario strict political boundaries have been established. That doesn't explain the previous exclusions.

Possibly this type of publication has no place for 'critical comment'. At the same time the authors attempt to come to terms with the historical context and personal dilemmas of the artists, there is a tendency to gloss over dry periods and the folios filled with works that are sub-standard. Now all artists experience such periods. Most artists have been totally dissatisfied with some of their works. The readers are missing a critical evaluation. In a sense 'what makes for good Indian art?'

Carl Ray is a good case in point. On more than one occasion, this Sandy Lake artist admitted his landscapes were his beer-money paintings. When he needed cash in a hurry, he would instantly produce one of his landscapes — the duck cruising the Northern Ontario waters under a brilliant moon. Having heard this from Carl Ray personally makes it difficult to accept the scholarly analysis of this type of work by Miss McLuhan.

Or where is the examination of an artist's own critique of his or her work? Does a finished product, in that every square millimeter of canvas or paper is covered, make it ready for sale? Where is a mention of the destruction of inferior works? Norval Morrisseau has sold many of this type of painting.

These last few comments have not been made to discredit either the artists or the authors of *Norval Morrisseau and the Emergence of the Image Makers*. It is just a fond wish that sometimes there would be a balance. Not all Canadian art has withstood the test of time. But we don't need two or three generations to separate us from creation to critique. For those who are interested in Canadian Indian art there is need for perspective and balance. If one cannot find it in a publication as valuable as this one, where does one find it?

This book by Hill and McLuhan coincides with the 1984 exhibit and tour through five communities of Ontario sponsored by the Art Gallery of Ontario. To many people, and to the two authors, a lot of credit is due. Tom Hill, a Seneca from the Six Nations Reserve who has worked with Indian art and written many publications in this area, and Elizabeth McLuhan, who has worked with the Ontario government as Native Arts Consultant and who currently is curator of the Thunder Bay National Exhibition Centre and Centre for Indian Art, have combined to graphically and sensitively make the case for Indian 'Image Makers'.

'Whether out of genuine appreciation, guilt over past sins, or a need to acquire something Canadian, the art-buying public chose to look at the new art emerging from Indian communities as a significant statement from a fellow Canadian.' Without coming to a firm conclusion, because in fact there may not be one, Tom Hill in his historical perspective of Indian art in Canada writes of the emerging marketability of Indian art. In a concise and sympathetic essay he chronicles the traditional art forms of the Indian.

Where Mr Hill provides a historical context for the emergence of the Indian art form, Miss McLuhan comes to grips with the individual artists and attempts to make them relevant to the Canadian audience. Starting with the statement that the book 'is a visual journey following one man's search for a style that would bridge two cultures, a style that could communicate the essence of Ojibwa values and perceptions to contemporary Native and non-Native viewers alike', Miss McLuhan provides a concrete analysis of Native Indian art.

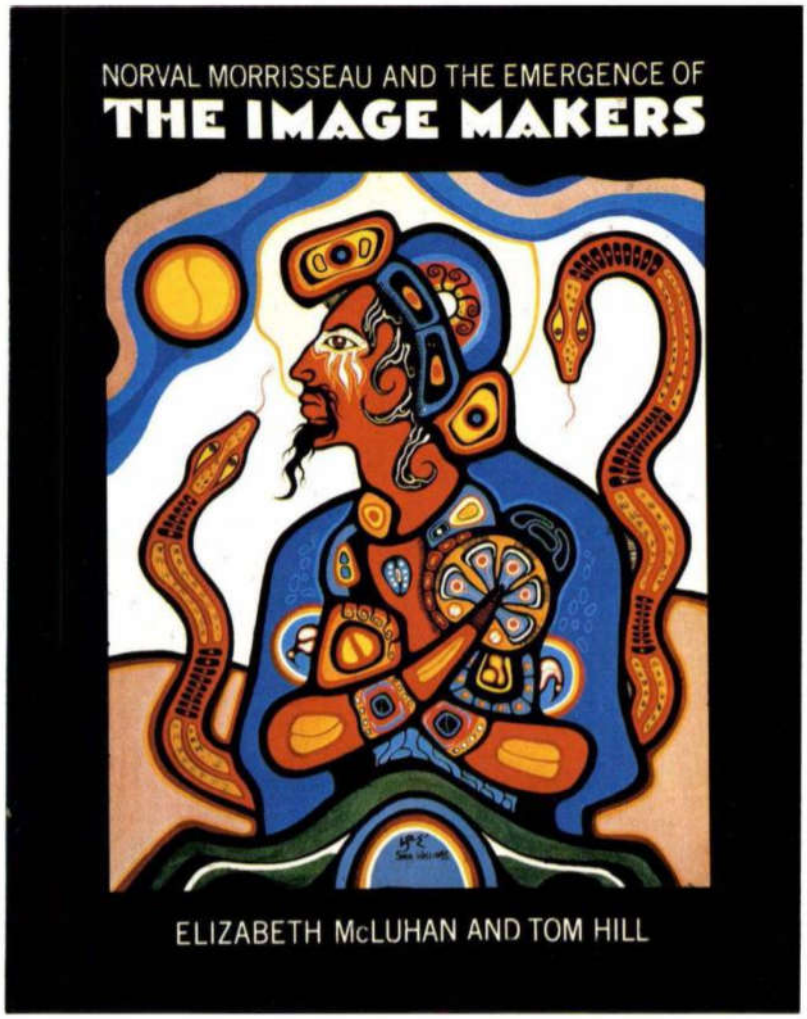
Alongside this introduction is a picture of Norval Morrisseau, a portrait totally unlike any of the other artists included. Whereas Daphne Odjig is seen as a smiling and gracious woman and Roy Thomas is dressed in an open-collared white shirt and suit jacket, Morrisseau is grimacing through outstretched fingers, glaring contemptuously at his next vision, with his mouth snarling in unbridled cynicism. Now that may be construed as a personal reflection of the image presented and of the man himself. Of course it is.

Here is a man who is a stranger to almost everyone. He has crossed many paths. Yet, does anyone really know him? One Winnipeg newspaper reporter in attempting to interview him a number of years ago eventually wrote of his 'non-interview' with the 'Big Fellow'.

Miss McLuhan has written well of Morrisseau and his art. But for those whose paths he has crossed, there is something missing. It is the critical element and those elusive qualities of the man that can rarely be portrayed in words.

What Miss McLuhan does is extensively bring to life as well the images presented in the book. There is no question that for the most part she does know of what she writes, from the dated pictographs of Northeastern Ontario to Morrisseau, from Odjig's illustrations and expressionist paintings through to Saul Williams's and Blake Debassige's iconography and ritualized images of daily life.

What is missing, White society in this country may never know. While Miss McLuhan acknowl-



edges the breakthrough of Morrisseau and the Image Makers in shattering native taboos of sharing spiritual images with society at large, she admits not all is known. Maybe, just maybe, there are some things White society should never know. Some things are sacred.

Gary Scherbain of Winnipeg managed the Wah-sa Gallery and has been dealing with native artists for eight years.

COLD SUMMER WIND

By Clayton Klein. Wilderness House Books, Fowlerville, Michigan, 1983. 227 pp., illus. $13.95 (U.S. funds).

Reviewed by Alex M. Hall

Cold Summer Wind is the author's account of a number of canoe trips that he and his son made in northwestern Canada during the 1960s and 1970s. In 1964 and 1968 they canoed the Cochrane and Thlewiaza River areas in northern Saskatchewan and Manitoba and in the 1970s they travelled in the Barrens: down the Kazan, Thelon and Back rivers in the Northwest Territories. The Kleins' experiences should prove educational to anyone contemplating a Barren Lands canoe trip for the first time. There is also an interesting chapter on Father Joseph Buliard of Garry Lake.

Most of the summers that the author chose for his canoe trips were much cooler and wetter than average — hence the title of the book. The Kleins frequently underestimated the time it would take them to reach their destinations. As a result, page after page of the book portrays the author and his son pressing on against high winds and cold rains, running short of food and sometimes getting themselves into dangerous situations. It is obvious that much of the hardship they endured could have been eased considerably or avoided altogether with more effective planning and more realistic choices of clothing and equipment. To their credit, they always managed to achieve their destinations and in the end proved themselves capable travellers.

Klein writes with some knowledge of his subject but he makes many mistakes, especially when he digresses into discussions of the wildlife and human history of the region. For example, he falls into the old trap of quoting antiquated estimates of caribou numbers, which in the past few years have proved to have been far too low.

The author has apparently published the book himself. It is obvious that his manuscript was never scrutinized by an editor and therein lies its greatest weakness — the stilted, unnatural conversations between Klein and his son.

Alex Hall is a wildlife biologist who operates Canoe Arctic Inc., a business offering guided canoe trips in the tundra and taiga of the Northwest Territories.

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